

**Report No.:** 244378056a 001 Page 1 of 148

**Client:** ESTUN AUTOMATION CO., LTD

**Contact Information:** 16, Shuige Road, Jiangning Development Zone, Nanjing

**Identification/  
Model No(s):** Controller Device for Servo Motors (Servo Drive)  
ED3L-xA##-\*  
(x=A5, 01, 02, 04, 08, 10, 15, 20;  
# stands for A-Z to indicate encoder software edition;  
-\* stands for null to indicate general manufacture;  
-\* stands for -0 to -9 or -A to -Z or any other form to indicate client  
number)

**Condition at delivery:** Test item complete and undamaged.

**Sample Receiving date:** 2021-05-26, 2021-08-17, 2021-08-24, 2021-08-25, 2021-08-30, 2021-09-09, 2021-11-08

**Testing Period:** 2021-05-26 to 2021-11-09

**Place of testing:** Chemical laboratory Shanghai

**Test Specification:**

**Test result:**

Customer's requirement:

1. Screening Test by XRF spectroscopy  
Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB)  
and Polybrominated diphenyl ethers (PBDE)  
BBP, DBP, DEHP, DIBP content  
According to UK RoHS: The Restriction of the Use of Certain Hazardous  
Substances in Electrical and Electronic Equipment Regulations 2012, Statutory  
Instrument 2012/3032 and its amendments

PASS

For and on behalf of  
TÜV Rheinland (Shanghai) Co., Ltd.



2021-12-13

Eric Xu / Project Engineer

*Date*

*Name/Position*

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.  
This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.  
"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

**Test Report No.: 244378056a 001**

Page 2 of 148

**Material List:**

Item: Controller Device for Servo Motors (Servo Drive)

ED3L-xA##-\*

(x=A5, 01, 02, 04, 08, 10, 15, 20;

# stands for A-Z to indicate encoder software edition;

-\* stands for null to indicate general manufacture;

-\* stands for -0 to -9 or -A to -Z or any other form to indicate client number)

Material No.	Material	Color	Location
M001	Plastic + printing	grey + beige	refer to photo
M002	Plastic	grey	refer to photo
M003	Plastic + adhesive	silver/black	refer to photo
M004	Metal	silver	refer to photo
M005	Glue	white	refer to photo
M006	Plastic	grey	refer to photo
M007	Plastic	white	refer to photo
M008	Plastic	black	refer to photo
M009	Plastic	red	refer to photo
M010	Plastic	black	refer to photo
M011	Plastic	black	refer to photo
M012	Plastic + adhesive	silver/black/green	refer to photo
M013	Plastic	black	refer to photo
M014	Metal	silver	refer to photo
M015	Plastic	white	refer to photo
M016	Metal	silver	refer to photo
M017	Solder	silver	refer to photo
M018	Plastic	translucent	refer to photo
M019	Metal	silver	refer to photo
M020	PCB board	green	refer to photo
M021	Plastic	black	refer to photo
M022	Metal	silver	refer to photo
M023	Magnet	black	refer to photo
M024	Metal	silver	refer to photo
M025	Metal	copper	refer to photo

**Test Report No.: 244378056a 001**

Page 3 of 148

M026	Metal	silver	refer to photo
M027	Paper + plastic	brown	refer to photo
M028	Ceramic	white	refer to photo
M029	Plastic + Textile	white	refer to photo
M030	Metal	silver	refer to photo
M031	Metal	silver	refer to photo
M032	Plastic	black	refer to photo
M033	Plastic	black	refer to photo
M034	Metal	silver	refer to photo
M035	Plastic	black	refer to photo
M036	Plastic	grey	refer to photo
M037	Metal	silver	refer to photo
M038	Metal	golden	refer to photo
M039	Plastic	grey	refer to photo
M040	Plastic	black	refer to photo
M041	Plastic	white	refer to photo
M042	Plastic	transparent	refer to photo
M043	Plastic + printing	black + white	refer to photo
M044	Metal	silver	refer to photo
M045	Metal	silver	refer to photo
M046	Metal	silver	refer to photo
M047	Metal	silver	refer to photo
M048	Metal	silver	refer to photo
M049	Metal	silver	refer to photo
M050	Metal	silver	refer to photo
M051	Metal	silver	refer to photo
M052	Metal	silver	refer to photo
M053	Metal	silver	refer to photo
M054	PCB board	green	refer to photo
M055	Metal	golden	refer to photo
M056	Plastic	black	refer to photo
M057	Plastic	black	refer to photo

**Test Report No.: 244378056a 001**

Page 4 of 148

M058	Plastic	black	refer to photo
M059	Plastic	black	refer to photo
M060	Plastic	black	refer to photo
M061	Plastic	black	refer to photo
M062	Ceramic	brown	refer to photo
M063	Glass	red/black	refer to photo
M064	Ceramic	black	refer to photo
M065	Metal	silver	refer to photo
M066	Ceramic	black/white	refer to photo
M067	Metal	silver	refer to photo
M068	Metal	silver	refer to photo
M069	Plastic	black	refer to photo
M070	Metal	silver	refer to photo
M071	Plastic	black	refer to photo
M072	Metal	silver	refer to photo
M073	Metal	silver	refer to photo
M074	Plastic	black	refer to photo
M075	Metal	silver	refer to photo
M076	Plastic	black	refer to photo
M077	Plastic	white/black/red	refer to photo
M078	PCB board	green	refer to photo
M079	Solder	silver	refer to photo
M080	Plastic	black	refer to photo
M081	Metal	golden	refer to photo
M082	Metal	golden	refer to photo
M083	Plastic	black	refer to photo
M084	Plastic	yellow	refer to photo
M085	Plastic	green	refer to photo
M086	Plastic	black	refer to photo
M087	Metal	golden	refer to photo
M088	Solder	silver	refer to photo
M089	Paper + adhesive	white/black	refer to photo

**Test Report No.: 244378056a 001**

Page 5 of 148

M090	Plastic	black	refer to photo
M091	Plastic	grey	refer to photo
M092	Metal	golden	refer to photo
M093	Metal	silver	refer to photo
M094	Metal	silver	refer to photo
M095	Metal	silver	refer to photo
M096	Ceramic	white	refer to photo
M097	PCB board	green	refer to photo
M098	Plastic	grey	refer to photo
M099	Ceramic	white	refer to photo
M100	Plastic	black	refer to photo
M101	Plastic	grey	refer to photo
M102	Plastic	black	refer to photo
M103	Ceramic	white	refer to photo
M104	Plastic	black	refer to photo
M105	Plastic	beige/black	refer to photo
M106	Metal	silver	refer to photo
M107	Plastic	white	refer to photo
M108	Metal	golden	refer to photo
M109	Plastic	black	refer to photo
M110	Ceramic	black	refer to photo
M111	Ceramic	yellow	refer to photo
M112	Metal	copper	refer to photo
M113	Magnet	brown	refer to photo
M114	Plastic	black	refer to photo
M115	Plastic	black/white	refer to photo
M116	Plastic	black	refer to photo
M117	Metal	silver	refer to photo
M118	Metal	silver/black	refer to photo
M119	Plastic	black	refer to photo
M120	Metal	copper	refer to photo
M121	Plastic	black	refer to photo

**Test Report No.: 244378056a 001**

Page 6 of 148

M122	Metal	copper	refer to photo
M123	Plastic	transparent	refer to photo
M124	Plastic + adhesive	yellow/black	refer to photo
M125	Magnet	black	refer to photo
M126	Plastic	black	refer to photo
M127	Plastic	black	refer to photo
M128	Metal	silver	refer to photo
M129	Plastic	blue/white	refer to photo
M130	Metal	silver	refer to photo
M131	Plastic	black	refer to photo
M132	Metal	silver	refer to photo
M133	Plastic	black	refer to photo
M134	Metal	silver	refer to photo
M135	Metal	silver	refer to photo
M136	Plastic	black/golden	refer to photo
M137	Plastic	grey	refer to photo
M138	Solder	silver	refer to photo
M139	Metal	golden	refer to photo
M140	Plastic + printing	grey + golden	refer to photo
M141	Plastic + adhesive	silver/black	refer to photo
M142	Glue	white	refer to photo
M143	Metal	silver	refer to photo
M144	Plastic + printing	black + white	refer to photo
M145	Plastic	white	refer to photo
M146	Plastic	black	refer to photo
M147	Metal	silver	refer to photo
M148	Metal	silver	refer to photo
M149	Metal	silver	refer to photo
M150	Metal	silver	refer to photo
M151	Metal	silver	refer to photo
M152	Metal	silver	refer to photo
M153	Metal	silver	refer to photo

**Test Report No.: 244378056a 001**

Page 7 of 148

M154	Plastic	white	refer to photo
M155	Metal	silver	refer to photo
M156	Plastic	black	refer to photo
M157	Metal	silver	refer to photo
M158	Plastic	black	refer to photo
M159	Metal	silver	refer to photo
M160	PCB board	green	refer to photo
M161	Plastic	black	refer to photo
M162	Metal	silver	refer to photo
M163	Ceramic	black/white	refer to photo
M164	Metal	silver	refer to photo
M165	Metal	golden	refer to photo
M166	Plastic	black	refer to photo
M167	Metal	silver	refer to photo
M168	Plastic	blue/white	refer to photo
M169	Ceramic	beige	refer to photo
M170	Plastic	black	refer to photo
M171	Plastic	black	refer to photo
M172	Plastic	white/black	refer to photo
M173	Paper + adhesive	white/black	refer to photo
M174	Plastic	black	refer to photo
M175	Plastic	grey	refer to photo
M176	Plastic	black/white	refer to photo
M177	Plastic	black	refer to photo
M178	Plastic	black	refer to photo
M179	Ceramic	black	refer to photo
M180	Ceramic	yellow	refer to photo
M181	Plastic	grey	refer to photo
M182	Plastic	black	refer to photo
M183	Metal	golden	refer to photo
M184	Metal	golden	refer to photo
M185	Plastic	black	refer to photo

**Test Report No.: 244378056a 001**

Page 8 of 148

M186	Metal	silver	refer to photo
M187	Metal	silver	refer to photo
M188	Plastic	black	refer to photo
M189	Metal	golden	refer to photo
M190	Plastic	black	refer to photo
M191	Metal	silver	refer to photo
M192	Plastic	green	refer to photo
M193	Plastic	yellow	refer to photo
M194	Metal	silver	refer to photo
M195	Plastic	black	refer to photo
M196	Metal	golden	refer to photo
M197	Plastic	multicolor	refer to photo
M198	Plastic	black	refer to photo
M199	Metal	silver	refer to photo
M200	Plastic	black	refer to photo
M201	Metal	silver	refer to photo
M202	Plastic	black	refer to photo
M203	Metal	golden	refer to photo
M204	Metal	silver	refer to photo
M205	PCB board	green	refer to photo
M206	Solder	silver	refer to photo
M207	Glass	multicolor	refer to photo
M208	Plastic	black	refer to photo
M209	Plastic	white	refer to photo
M210	Metal	silver	refer to photo
M211	Magnet	black	refer to photo
M212	Plastic	black	refer to photo
M213	Metal	copper	refer to photo
M214	Plastic + adhesive	yellow	refer to photo
M215	Solder	silver	refer to photo
M216	Plastic + printing	grey + beige	refer to photo
M217	Plastic	transparent	refer to photo

**Test Report No.: 244378056a 001**

Page 9 of 148

M218	Plastic + adhesive	silver/black	refer to photo
M219	Metal	silver	refer to photo
M220	Plastic	grey	refer to photo
M221	Plastic	white	refer to photo
M222	Metal	silver	refer to photo
M223	Plastic	whtie	refer to photo
M224	Plastic + Textile	white	refer to photo
M225	Metal	silver	refer to photo
M226	Metal	silver	refer to photo
M227	Metal	silver	refer to photo
M228	Metal	silver	refer to photo
M229	Metal	silver	refer to photo
M230	Metal	silver	refer to photo
M231	Metal	silver	refer to photo
M232	Metal	silver	refer to photo
M233	Metal	silver	refer to photo
M234	Metal	silver	refer to photo
M235	Metal	silver	refer to photo
M236	Metal	silver	refer to photo
M237	Metal	silver	refer to photo
M238	Metal	silver	refer to photo
M239	Metal	silver	refer to photo
M240	Metal	silver	refer to photo
M241	Metal	silver	refer to photo
M242	Metal	silver	refer to photo
M243	Metal	silver	refer to photo
M244	Metal	silver	refer to photo
M245	Plastic	white	refer to photo
M246	Metal	silver	refer to photo
M247	Plastic	black	refer to photo
M248	Plastic	black	refer to photo
M249	Glue	black	refer to photo

**Test Report No.: 244378056a 001**

Page 10 of 148

M250	Metal	silver	refer to photo
M251	Plastic + coating	black + white	refer to photo
M252	Plastic	white	refer to photo
M253	Plastic	black	refer to photo
M254	Plastic	grey	refer to photo
M255	Metal	silver	refer to photo
M256	Metal	silver	refer to photo
M257	Plastic	black	refer to photo
M258	Plastic + adhesive	multicolor	refer to photo
M259	Metal	silver	refer to photo
M260	Magnet	black	refer to photo
M261	Metal	silver	refer to photo
M262	Plastic	black	refer to photo
M263	Metal	silver	refer to photo
M264	Metal	silver	refer to photo
M265	Metal	copper	refer to photo
M266	Plastic	black	refer to photo
M267	Metal	silver	refer to photo
M268	Plastic	black	refer to photo
M269	Plastic	red	refer to photo
M270	Plastic	black	refer to photo
M271	PCB board	blue	refer to photo
M272	Plastic	black	refer to photo
M273	Plastic	black	refer to photo
M274	Glue	yellow	refer to photo
M275	Ceramic	black/white	refer to photo
M276	Ceramic	beige	refer to photo
M277	Metal	silver	refer to photo
M278	Metal	copper	refer to photo
M279	Solder	silver	refer to photo
M280	Plastic	black/white	refer to photo
M281	Plastic	black	refer to photo

**Test Report No.: 244378056a 001**

Page 11 of 148

M282	Metal	silver	refer to photo
M283	Ceramic	yellow	refer to photo
M284	Metal	silver	refer to photo
M285	Metal	silver	refer to photo
M286	Plastic	white	refer to photo
M287	Glue	white	refer to photo
M288	Ceramic	white	refer to photo
M289	Plastic	black	refer to photo
M290	Plastic	black	refer to photo
M291	Metal	silver	refer to photo
M292	Plastic	black	refer to photo
M293	Metal	golden	refer to photo
M294	Plastic	black	refer to photo
M295	Plastic	grey	refer to photo
M296	Plastic	black	refer to photo
M297	Metal	copper	refer to photo
M298	Magnet	red	refer to photo
M299	Ceramic	black	refer to photo
M300	Plastic	red	refer to photo
M301	Plastic	grey	refer to photo
M302	Plastic	black	refer to photo
M303	Metal	golden	refer to photo
M304	Metal	silver	refer to photo
M305	Plastic	black	refer to photo
M306	Metal	silver	refer to photo
M307	Plastic	blue/white	refer to photo
M308	Plastic + adhesive	yellow/black	refer to photo
M309	Magnet	black	refer to photo
M310	Plastic	black	refer to photo
M311	Metal	copper	refer to photo
M312	Metal	copper	refer to photo
M313	Plastic	translucent	refer to photo

**Test Report No.: 244378056a 001**

Page 12 of 148

M314	Plastic	white	refer to photo
M315	Metal	silver	refer to photo
M316	Plastic	black	refer to photo
M317	Plastic	white/black	refer to photo
M318	Metal	silver/black	refer to photo
M319	Metal	copper	refer to photo
M320	Metal	silver	refer to photo
M321	Plastic	black	refer to photo
M322	Metal	silver	refer to photo
M323	Plastic	black	refer to photo
M324	Plastic	grey	refer to photo
M325	Metal	silver	refer to photo
M326	Plastic	grey	refer to photo
M327	PCB board	green	refer to photo
M328	Solder	silver	refer to photo
M329	Ceramic	black/white	refer to photo
M330	Ceramic	beige	refer to photo
M331	Plastic	black	refer to photo
M332	Plastic	black	refer to photo
M333	Plastic	black	refer to photo
M334	Plastic	black	refer to photo
M335	Plastic	black	refer to photo
M336	Plastic	black	refer to photo
M337	Glass	multicolor	refer to photo
M338	Metal	silver	refer to photo
M339	Metal	silver	refer to photo
M340	Plastic	black	refer to photo
M341	Metal	silver	refer to photo
M342	Plastic	black	refer to photo
M343	Metal	golden	refer to photo
M344	Plastic	black	refer to photo
M345	Metal	golden	refer to photo

**Test Report No.: 244378056a 001**

Page 13 of 148

M346	Metal	silver	refer to photo
M347	Plastic	yellow	refer to photo
M348	Metal	golden	refer to photo
M349	Plastic	black	refer to photo
M350	Plastic	green	refer to photo
M351	Metal	silver	refer to photo
M352	Plastic	black	refer to photo
M353	Metal	silver	refer to photo
M354	Metal	silver	refer to photo
M355	Plastic	black	refer to photo
M356	Plastic	black	refer to photo
M357	Plastic	multicolor	refer to photo
M358	PCB board	green	refer to photo
M359	Solder	silver	refer to photo
M360	PCB board	green	refer to photo
M361	Paper + adhesive	white/black	refer to photo
M362	Solder	black/white	refer to photo
M363	Ceramic	silver	refer to photo
M364	Plastic + printing	grey + beige	refer to photo
M365	Plastic + adhesive	silver/black	refer to photo
M366	Plastic + printing	black + white	refer to photo
M367	Plastic	transparent	refer to photo
M368	Metal	silver	refer to photo
M369	Glue	white	refer to photo
M370	Plastic	white	refer to photo
M371	Plastic	black	refer to photo
M372	Metal	silver	refer to photo
M373	Metal	silver	refer to photo
M374	Metal	silver	refer to photo
M375	Metal	silver	refer to photo
M376	Metal	silver	refer to photo
M377	Metal	silver	refer to photo

**Test Report No.: 244378056a 001**

Page 14 of 148

M378	Metal	silver	refer to photo
M379	Metal	silver	refer to photo
M380	Metal	silver	refer to photo
M381	Metal	silver	refer to photo
M382	Metal	silver	refer to photo
M383	Metal	silver	refer to photo
M384	Metal	silver	refer to photo
M385	Metal	silver	refer to photo
M386	Plastic	black	refer to photo
M387	Metal	silver	refer to photo
M388	Plastic	white	refer to photo
M389	Metal	silver	refer to photo
M390	Plastic	black	refer to photo
M391	Glue	black	refer to photo
M392	Metal	silver	refer to photo
M393	Plastic	blue/white	refer to photo
M394	Metal	silver	refer to photo
M395	Glass	multicolor	refer to photo
M396	Plastic	black	refer to photo
M397	Plastic	black	refer to photo
M398	Plastic + adhesive	yellow	refer to photo
M399	Metal	copper	refer to photo
M400	Plastic	black	refer to photo
M401	Ceramic	beige	refer to photo
M402	Ceramic	black/white	refer to photo
M403	Metal	copper	refer to photo
M404	Plastic	black	refer to photo
M405	Metal	silver	refer to photo
M406	Plastic	black	refer to photo
M407	Plastic	white	refer to photo
M408	Plastic	black	refer to photo
M409	Paper + adhesive	white/black	refer to photo

**Test Report No.: 244378056a 001**

Page 15 of 148

M410	Plastic	grey	refer to photo
M411	Plastic	black/white	refer to photo
M412	Plastic	black	refer to photo
M413	Plastic	black	refer to photo
M414	Ceramic	black	refer to photo
M415	Ceramic	yellow	refer to photo
M416	Plastic	grey	refer to photo
M417	Plastic	white	refer to photo
M418	Metal	silver	refer to photo
M419	Plastic	black	refer to photo
M420	Plastic	black	refer to photo
M421	Metal	silver	refer to photo
M422	Metal	silver	refer to photo
M423	Metal	silver	refer to photo
M424	Plastic	black	refer to photo
M425	Plastic	black	refer to photo
M426	Metal	golden	refer to photo
M427	Plastic	black	refer to photo
M428	Metal	golden	refer to photo
M429	Plastic	black	refer to photo
M430	Metal	golden	refer to photo
M431	Metal	silver	refer to photo
M432	Plastic	black	refer to photo
M433	Metal	golden	refer to photo
M434	Metal	silver	refer to photo
M435	Plastic	black	refer to photo
M436	Plastic	black	refer to photo
M437	Plastic	multicolor	refer to photo
M438	PCB board	green	refer to photo
M439	Solder	silver	refer to photo
M440	Plastic	black	refer to photo
M441	Metal	golden	refer to photo

**Test Report No.: 244378056a 001**

Page 16 of 148

M442	PCB board	green	refer to photo
M443	Solder	silver	refer to photo
M444	Plastic + adhesive	silver/black	refer to photo
M445	Plastic + printing	grey + beige	refer to photo
M446	Plastic	transparent	refer to photo
M447	Plastic + printing	black + white	refer to photo
M448	Metal	silver	refer to photo
M449	Plastic	grey	refer to photo
M450	Plastic	white	refer to photo
M451	Metal	silver	refer to photo
M452	Metal	silver	refer to photo
M453	Metal	silver	refer to photo
M454	Metal	silver	refer to photo
M455	Metal	silver	refer to photo
M456	Metal	silver	refer to photo
M457	Metal	silver	refer to photo
M458	Metal	silver	refer to photo
M459	Metal	silver	refer to photo
M460	Metal	silver	refer to photo
M461	Metal	silver	refer to photo
M462	Metal	silver	refer to photo
M463	Plastic	white	refer to photo
M464	Plastic	black	refer to photo
M465	Plastic	grey	refer to photo
M466	Metal	silver	refer to photo
M467	Metal	silver	refer to photo
M468	Plastic	black	refer to photo
M469	Plastic	grey/red	refer to photo
M470	Metal	silver	refer to photo
M471	Metal	silver	refer to photo
M472	Ceramic	white	refer to photo
M473	Metal	silver	refer to photo

**Test Report No.: 244378056a 001**

Page 17 of 148

M474	Plastic + Textile	white	refer to photo
M475	Paper + plastic	brown	refer to photo
M476	Metal	silver	refer to photo
M477	Plastic	white	refer to photo
M478	Metal	silver	refer to photo
M479	Plastic	black	refer to photo
M480	Plastic	black	refer to photo
M481	Glue	black	refer to photo
M482	Metal	silver	refer to photo
M483	Plastic + adhesive	multicolor	refer to photo
M484	Plastic	black	refer to photo
M485	Magnet	black	refer to photo
M486	Metal	silver	refer to photo
M487	Metal	silver	refer to photo
M488	Metal	copper	refer to photo
M489	Plastic	black	refer to photo
M490	Plastic	black	refer to photo
M491	Plastic	black	refer to photo
M492	Plastic	red	refer to photo
M493	Metal	silver	refer to photo
M494	Solder	silver	refer to photo
M495	PCB board	green	refer to photo
M496	Plastic	black	refer to photo
M497	Metal	silver	refer to photo
M498	Plastic	black	refer to photo
M499	Metal	silver	refer to photo
M500	Metal	silver	refer to photo
M501	Metal	silver	refer to photo
M502	Plastic	black	refer to photo
M503	Metal	silver	refer to photo
M504	Ceramic	yellow	refer to photo
M505	Glue	white	refer to photo

**Test Report No.: 244378056a 001**

Page 18 of 148

M506	Metal	silver	refer to photo
M507	Paper + adhesive	white/black	refer to photo
M508	Plastic	black/white	refer to photo
M509	Plastic	black	refer to photo
M510	Metal	copper	refer to photo
M511	Plastic	black	refer to photo
M512	Plastic	grey	refer to photo
M513	Plastic	blue/white	refer to photo
M514	Metal	silver	refer to photo
M515	Plastic	white	refer to photo
M516	Metal	silver	refer to photo
M517	Plastic	black	refer to photo
M518	Plastic	white	refer to photo
M519	Plastic + adhesive	yellow/white	refer to photo
M520	Plastic	black	refer to photo
M521	Metal	golden	refer to photo
M522	Plastic	transparent	refer to photo
M523	Metal	golden	refer to photo
M524	Metal	silver/black	refer to photo
M525	Plastic	grey	refer to photo
M526	Plastic	black	refer to photo
M527	Ceramic	white	refer to photo
M528	Ceramic	white	refer to photo
M529	Metal	silver	refer to photo
M530	Metal	silver	refer to photo
M531	Plastic	black	refer to photo
M532	Metal	golden	refer to photo
M533	Plastic	black	refer to photo
M534	Plastic	grey	refer to photo
M535	Plastic	black	refer to photo
M536	Ceramic	white	refer to photo
M537	Metal	golden	refer to photo

**Test Report No.: 244378056a 001**

Page 19 of 148

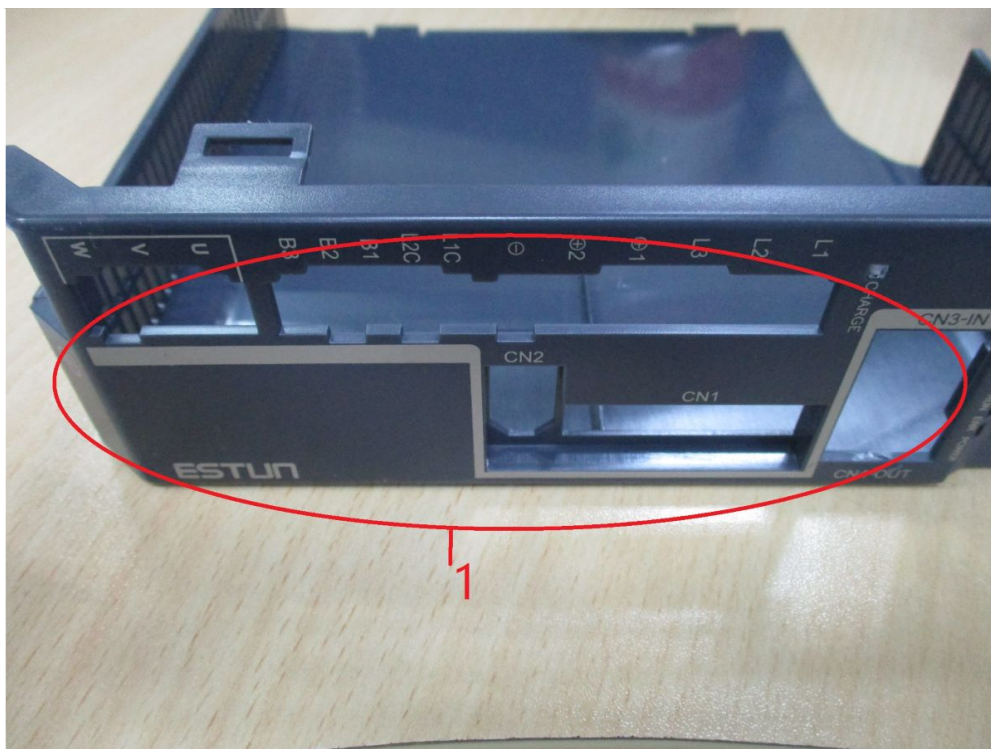
M538	Magnet	red	refer to photo
M539	Plastic	grey	refer to photo
M540	Plastic	grey	refer to photo
M541	Plastic	black	refer to photo
M542	Metal	golden	refer to photo
M543	Plastic	black	refer to photo
M544	Plastic	black	refer to photo
M545	Metal	golden	refer to photo
M546	Plastic	black	refer to photo
M547	Plastic	black	refer to photo
M548	Metal	silver	refer to photo
M549	Plastic	black	refer to photo
M550	Metal	golden	refer to photo
M551	Metal	silver	refer to photo
M552	Metal	silver	refer to photo
M553	Plastic	black	refer to photo
M554	Metal	golden	refer to photo
M555	Metal	silver	refer to photo
M556	Plastic	black	refer to photo
M557	Metal	golden	refer to photo
M558	Plastic	black	refer to photo
M559	Metal	silver	refer to photo
M560	Plastic	black	refer to photo
M561	Plastic	multicolor	refer to photo
M562	PCB board	green	refer to photo
M563	Solder	silver	refer to photo
M564	PCB board	green	refer to photo
M565	Solder	silver	refer to photo
M566	Ceramic	black/white	refer to photo
M567	Ceramic	beige	refer to photo
M568	PCB board	green	refer to photo
M569	Solder	silver	refer to photo

**Test Report No.: 244378056a 001** Page 20 of 148

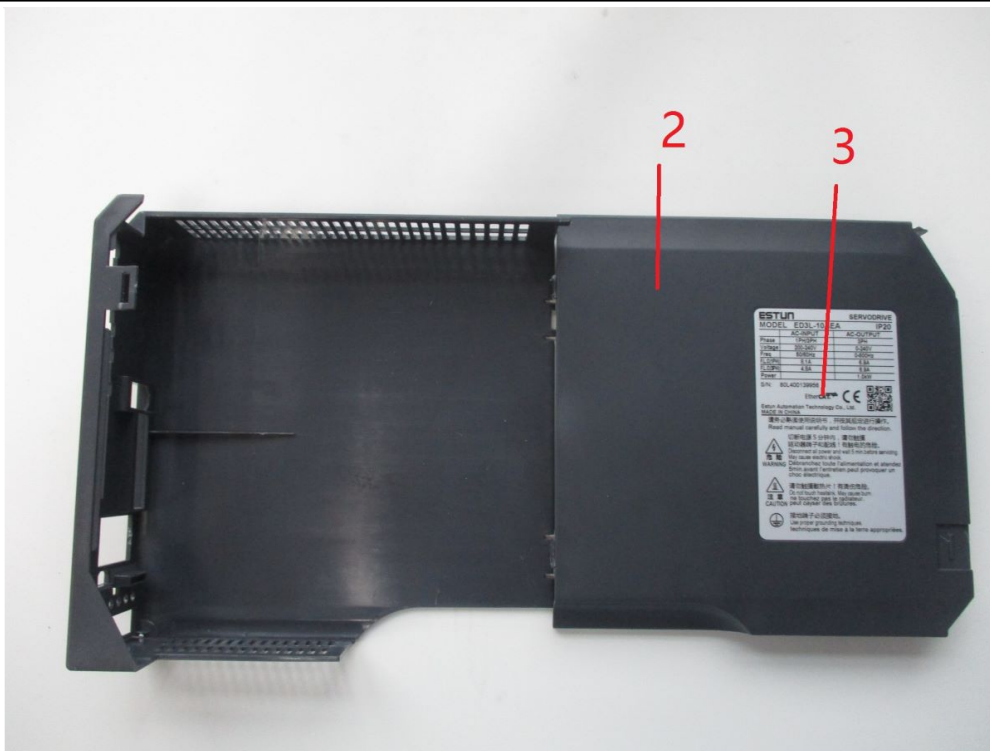
**1. Screening Test by XRF spectroscopy**

Test Method: Cadmium, Lead, Mercury, Chromium, Bromine  
-- With reference to IEC 62321-3-1:2013

**Test Result:**



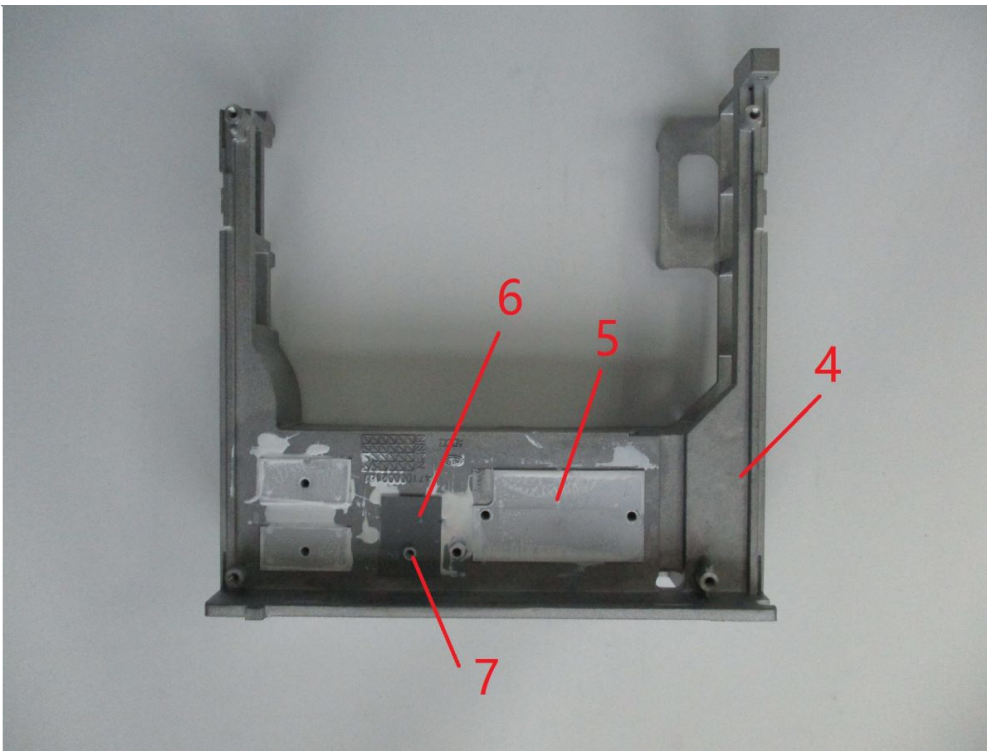
Material No.	Cd	Cr	Pb	Hg	Br
M001	< RL	< RL	< RL	< RL	< RL



Material No.	Cd	Cr	Pb	Hg	Br
M002	< RL	< RL	< RL	< RL	< RL
M003	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

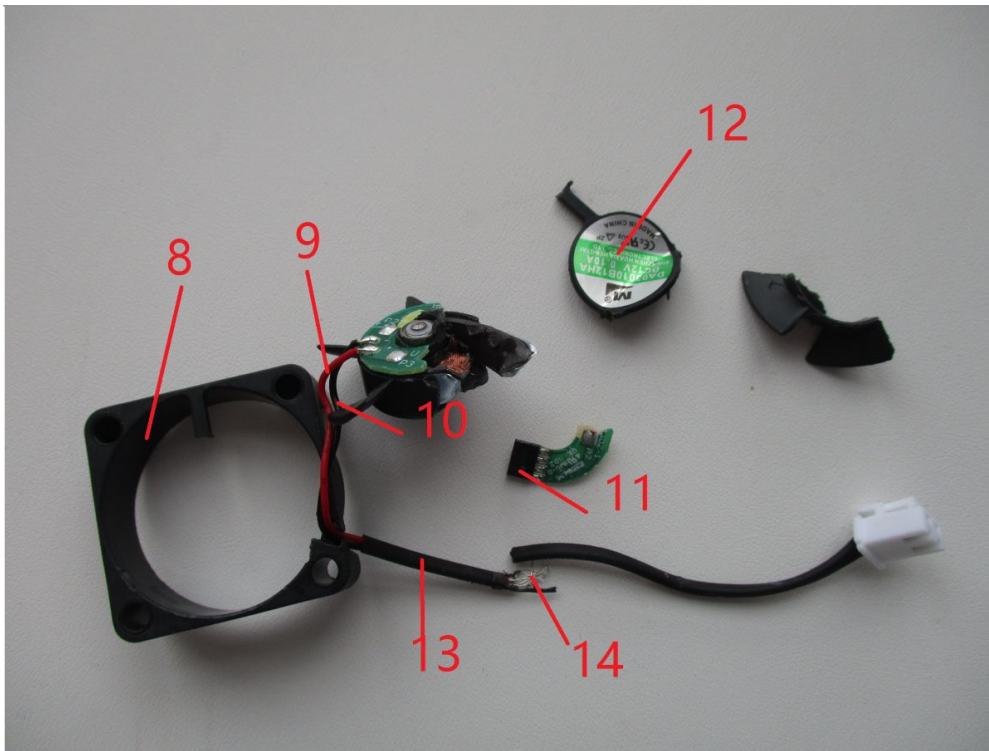
Page 22 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M004	< RL	< RL	< RL	< RL	n.a.
M005	< RL	< RL	< RL	< RL	< RL
M006	< RL	< RL	< RL	< RL	< RL
M007	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

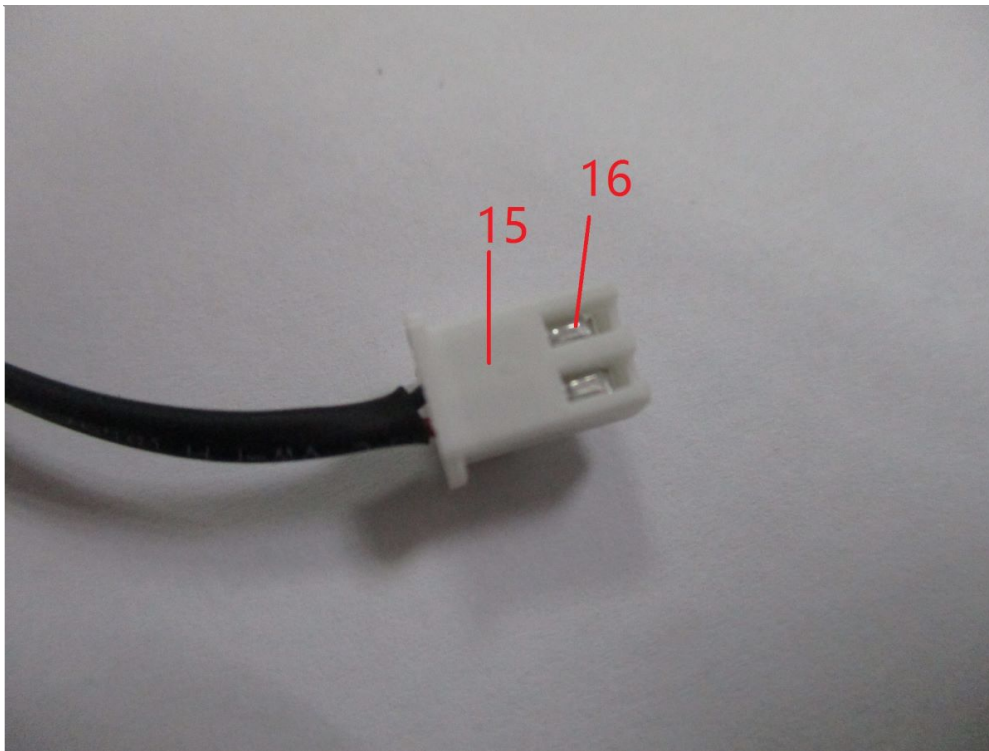
Page 23 of 148



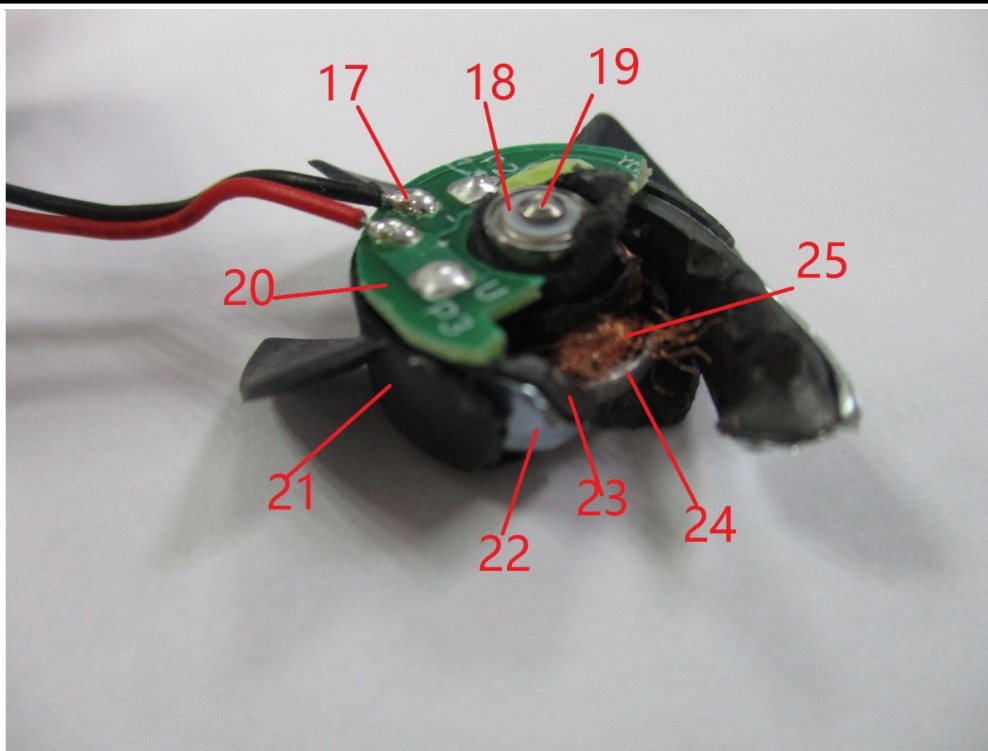
Material No.	Cd	Cr	Pb	Hg	Br
M008	< RL	< RL	< RL	< RL	d*2
M009	< RL	< RL	< RL	< RL	< RL
M010	< RL	< RL	< RL	< RL	< RL
M011	< RL	< RL	< RL	< RL	d*2
M012	< RL	< RL	< RL	< RL	< RL
M013	< RL	< RL	< RL	< RL	< RL
M014	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001**

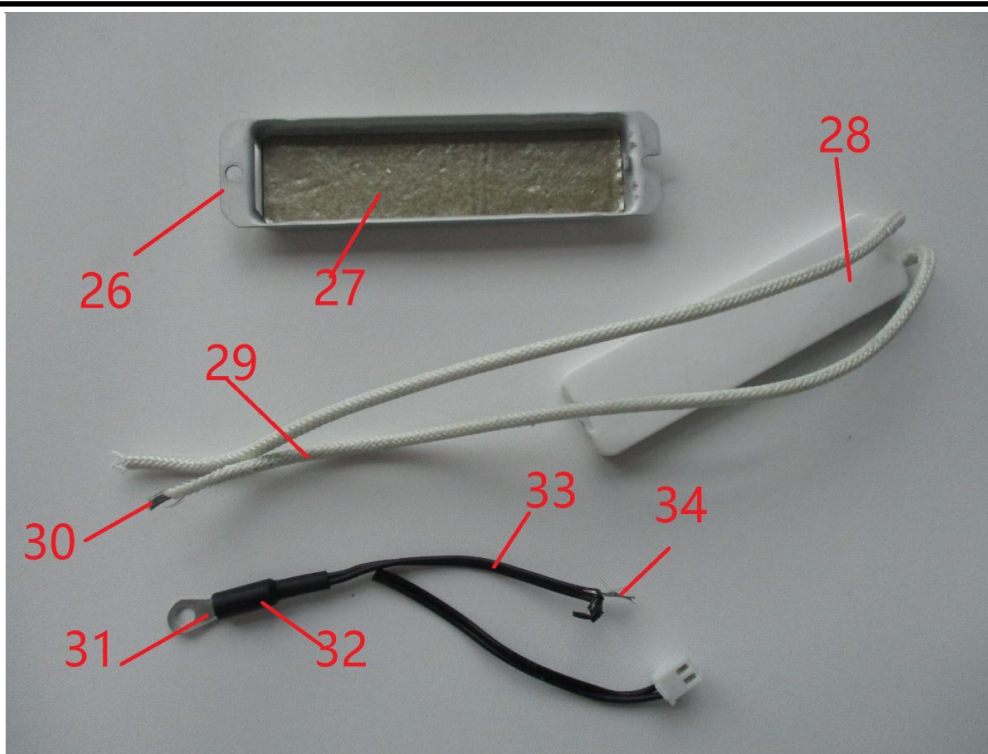
Page 24 of 148



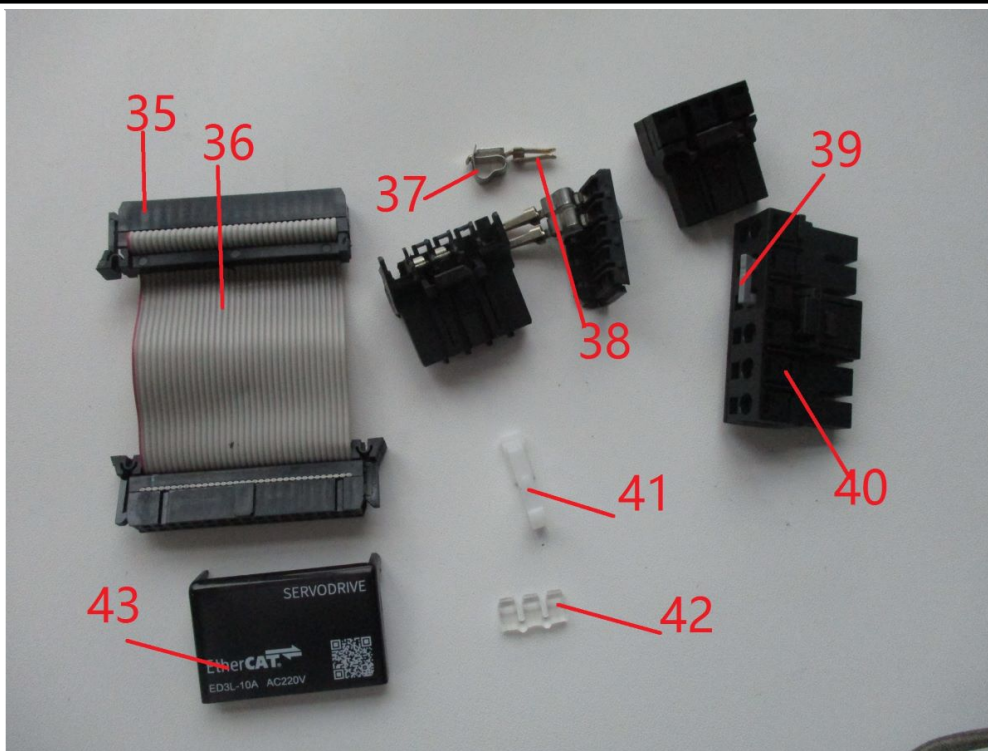
Material No.	Cd	Cr	Pb	Hg	Br
M015	< RL	< RL	< RL	< RL	< RL
M016	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M017	< RL	< RL	< RL	< RL	n.a.
M018	< RL	< RL	< RL	< RL	< RL
M019	< RL	d*2	< RL	< RL	n.a.
M020	< RL	< RL	< RL	< RL	d*2
M021	< RL	< RL	< RL	< RL	d*2
M022	< RL	d*2	< RL	< RL	n.a.
M023	< RL	< RL	< RL	< RL	n.a.
M024	< RL	d*2	< RL	< RL	n.a.
M025	< RL	< RL	< RL	< RL	n.a.



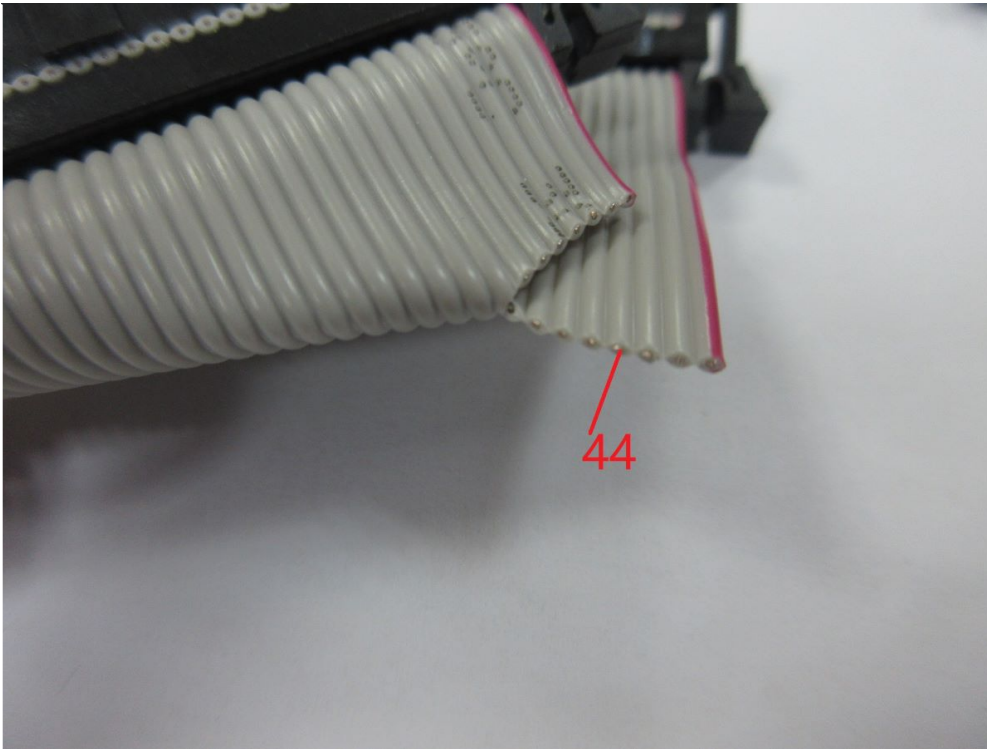
Material No.	Cd	Cr	Pb	Hg	Br
M026	< RL	< RL	< RL	< RL	n.a.
M027	< RL	< RL	< RL	< RL	< RL
M028	< RL	< RL	< RL	< RL	n.a.
M029	< RL	< RL	< RL	< RL	< RL
M030	< RL	< RL	< RL	< RL	n.a.
M031	< RL	d*2	< RL	< RL	n.a.
M032	< RL	< RL	< RL	< RL	< RL
M033	< RL	< RL	< RL	< RL	< RL
M034	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M035	< RL	< RL	< RL	< RL	d*2
M036	< RL	< RL	< RL	< RL	< RL
M037	< RL	d*2	< RL	< RL	n.a.
M038	< RL	< RL	< RL	< RL	n.a.
M039	< RL	< RL	< RL	< RL	< RL
M040	< RL	< RL	< RL	< RL	d*2
M041	< RL	< RL	< RL	< RL	< RL
M042	< RL	< RL	< RL	< RL	< RL
M043	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 28 of 148



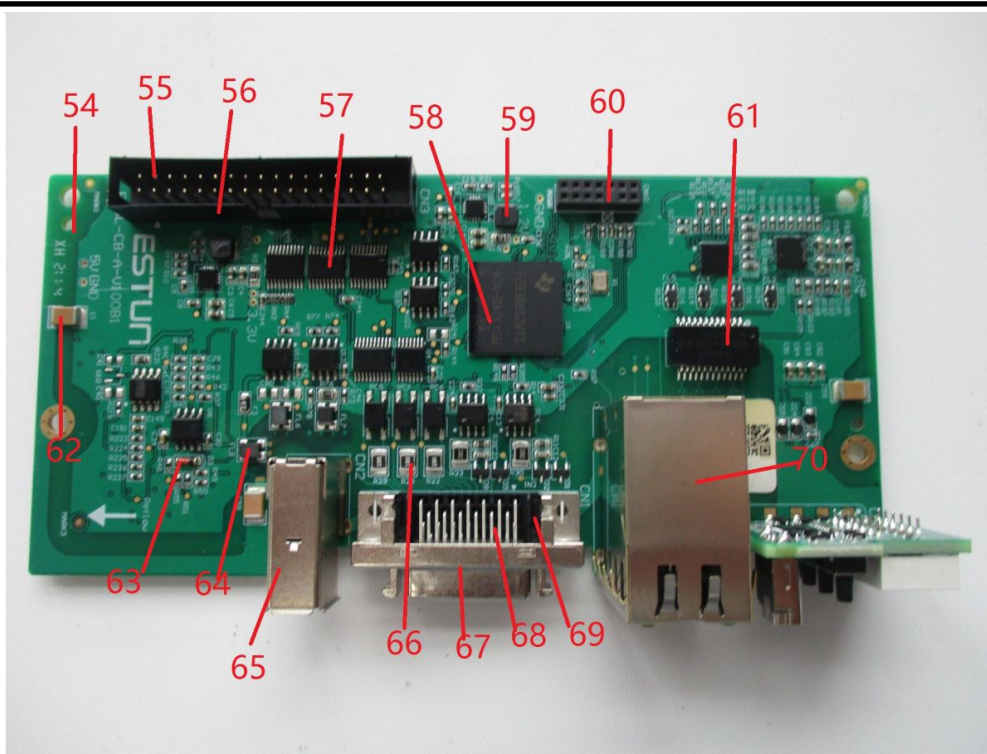
Material No.	Cd	Cr	Pb	Hg	Br
M044	< RL	< RL	< RL	< RL	n.a.

Test Report No.: 244378056a 001

Page 29 of 148

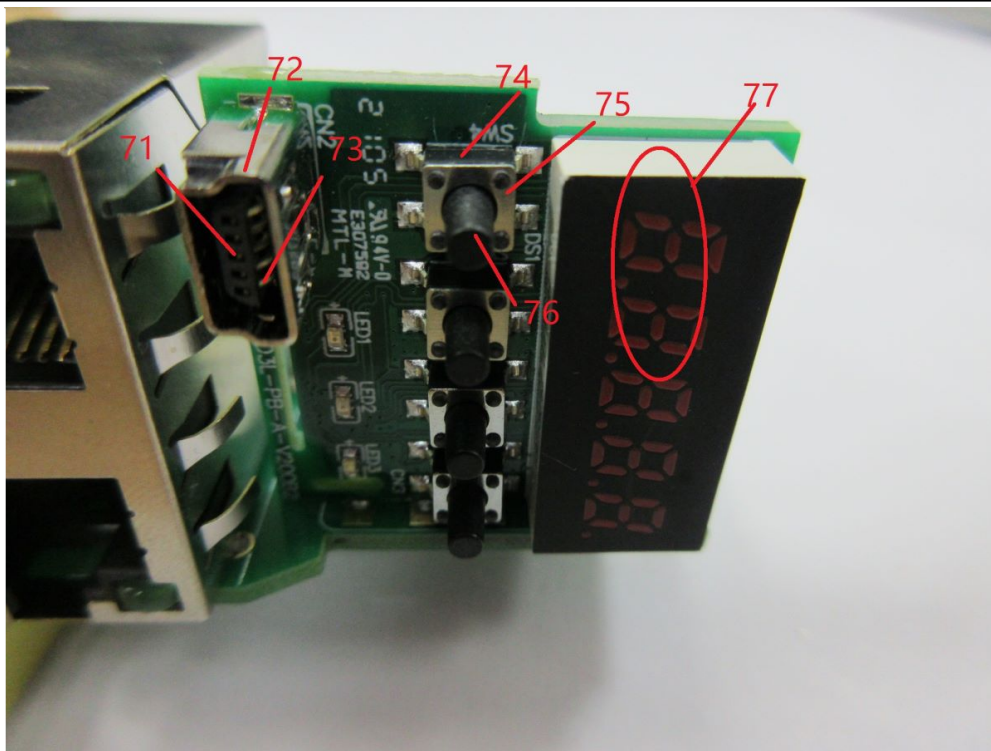


Material No.	Cd	Cr	Pb	Hg	Br
M045	< RL	< RL	< RL	< RL	n.a.
M046	< RL	d*2	< RL	< RL	n.a.
M047	< RL	< RL	< RL	< RL	n.a.
M048	< RL	d*2	< RL	< RL	n.a.
M049	< RL	d*2	< RL	< RL	n.a.
M050	< RL	d*2	< RL	< RL	n.a.
M051	< RL	d*2	< RL	< RL	n.a.
M052	< RL	d*2	< RL	< RL	n.a.
M053	< RL	d*2	< RL	< RL	n.a.

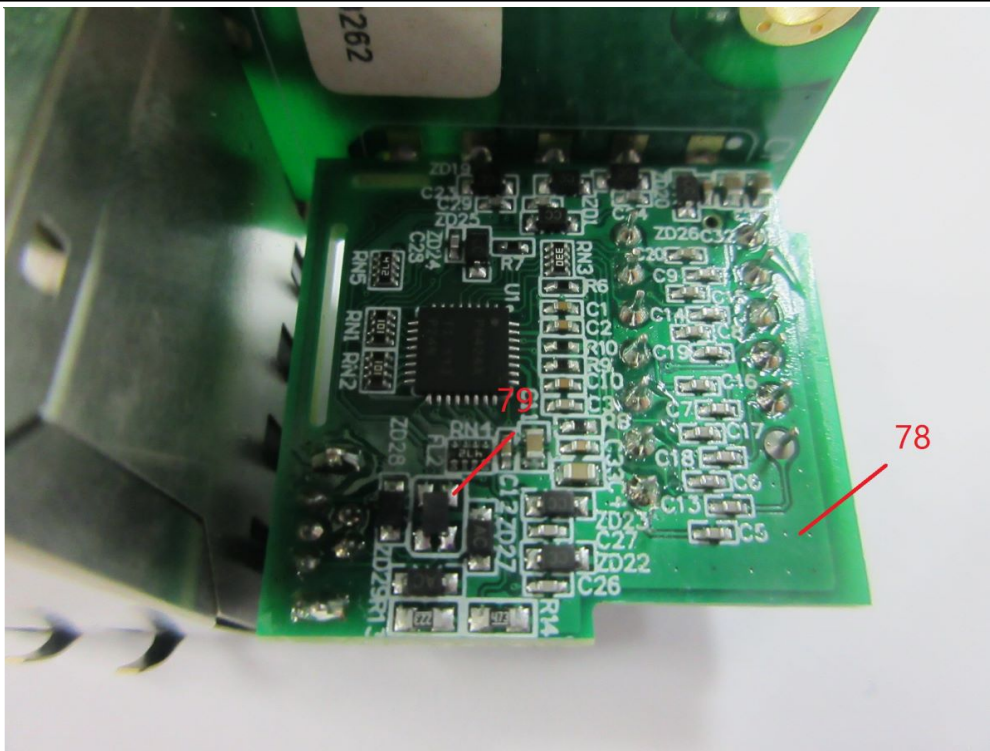


Material No.	Cd	Cr	Pb	Hg	Br
M054	< RL	< RL	< RL	< RL	d*2
M055	< RL	< RL	< RL	< RL	n.a.
M056	< RL	< RL	< RL	< RL	d*2
M057	< RL	< RL	< RL	< RL	< RL
M058	< RL	< RL	< RL	< RL	< RL
M059	< RL	< RL	< RL	< RL	< RL
M060	< RL	< RL	< RL	< RL	d*2
M061	< RL	< RL	< RL	< RL	< RL
M062	< RL	< RL	< RL	< RL	n.a.
M063	< RL	< RL	d*2	< RL	n.a.
M064	< RL	< RL	< RL	< RL	n.a.
M065	< RL	< RL	< RL	< RL	n.a.
M066	< RL	< RL	d*2	< RL	n.a.
M067	< RL	< RL	< RL	< RL	n.a.
M068	< RL	< RL	< RL	< RL	n.a.
M069	< RL	< RL	< RL	< RL	d*2
M070	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 31 of 148



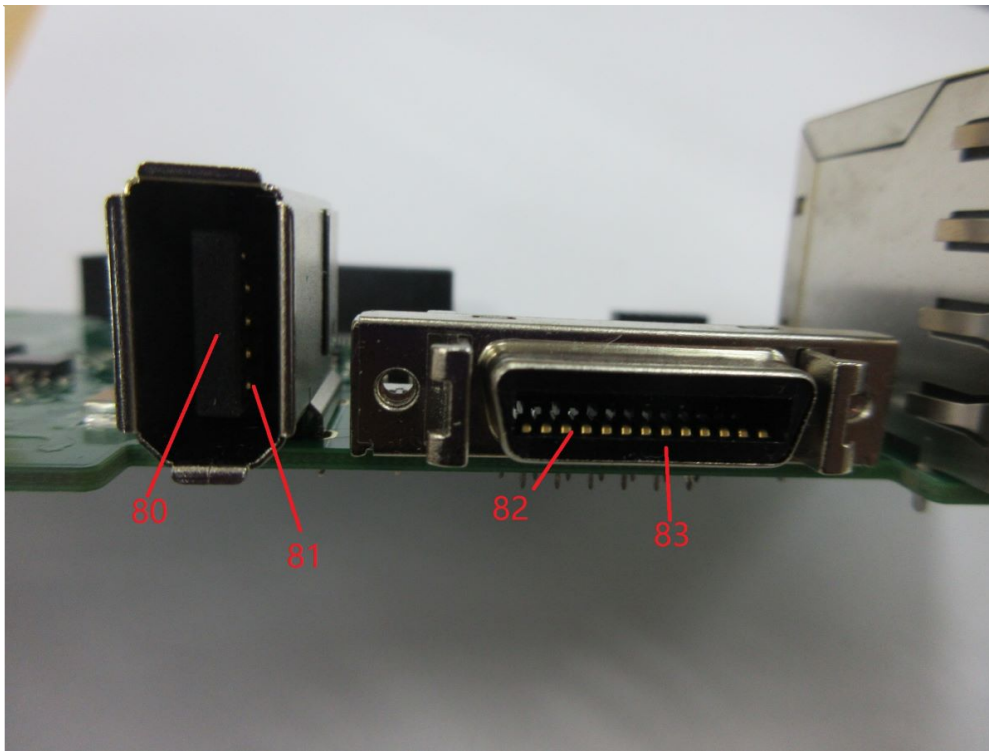
Material No.	Cd	Cr	Pb	Hg	Br
M071	< RL	< RL	< RL	< RL	< RL
M072	< RL	< RL	< RL	< RL	n.a.
M073	< RL	< RL	< RL	< RL	n.a.
M074	< RL	< RL	< RL	< RL	< RL
M075	< RL	< RL	< RL	< RL	n.a.
M076	< RL	< RL	< RL	< RL	< RL
M077	< RL	< RL	< RL	< RL	d*2



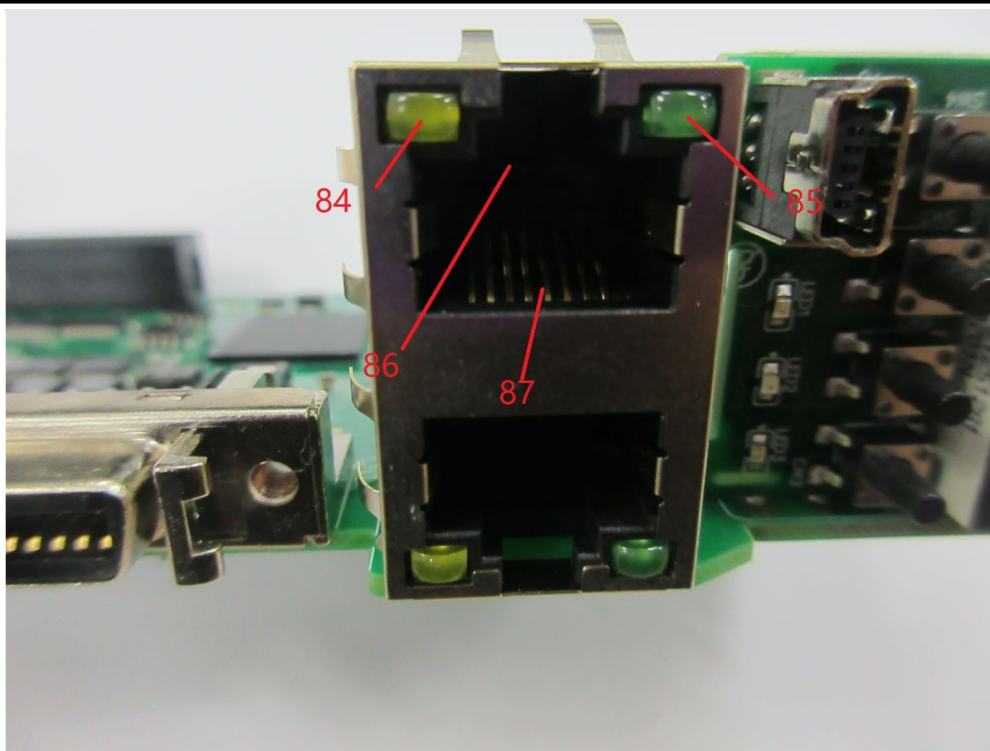
Material No.	Cd	Cr	Pb	Hg	Br
M078	< RL	< RL	< RL	< RL	< RL
M079	< RL	< RL	< RL	< RL	n.a.

Test Report No.: 244378056a 001

Page 33 of 148

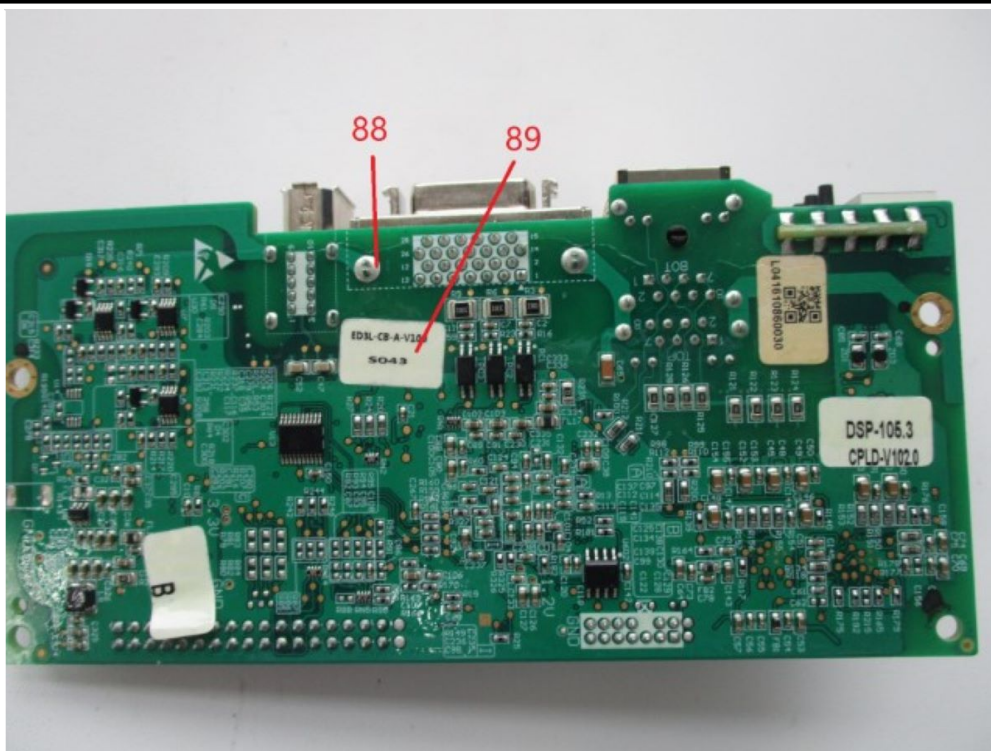


Material No.	Cd	Cr	Pb	Hg	Br
M080	< RL	< RL	< RL	< RL	d*2
M081	< RL	< RL	< RL	< RL	n.a.
M082	< RL	< RL	< RL	< RL	n.a.
M083	< RL	< RL	< RL	< RL	d*2

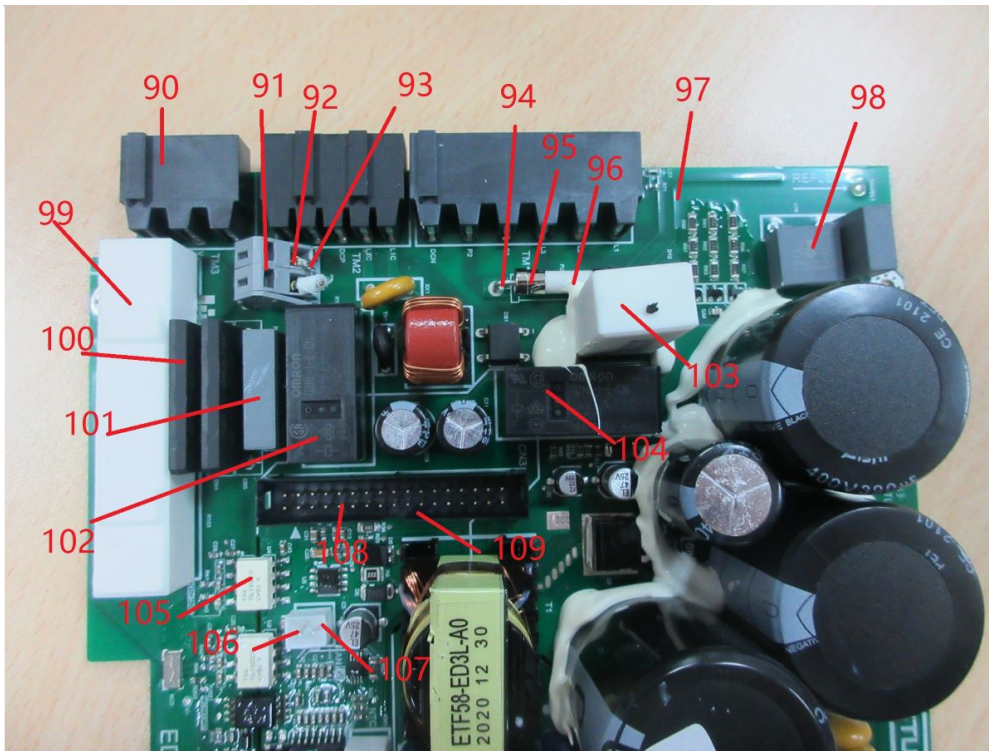


Material No.	Cd	Cr	Pb	Hg	Br
M084	< RL	< RL	< RL	< RL	< RL
M085	< RL	< RL	< RL	< RL	< RL
M086	< RL	< RL	< RL	< RL	d*2
M087	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 35 of 148



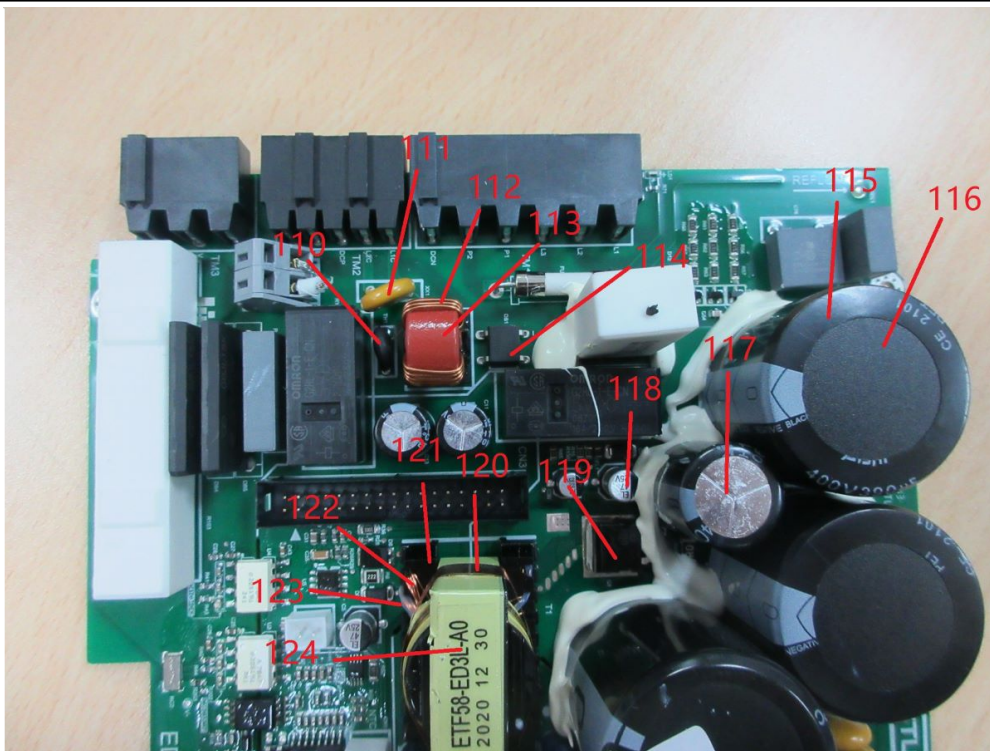
Material No.	Cd	Cr	Pb	Hg	Br
M088	< RL	< RL	< RL	< RL	n.a.
M089	< RL	< RL	< RL	< RL	< RL



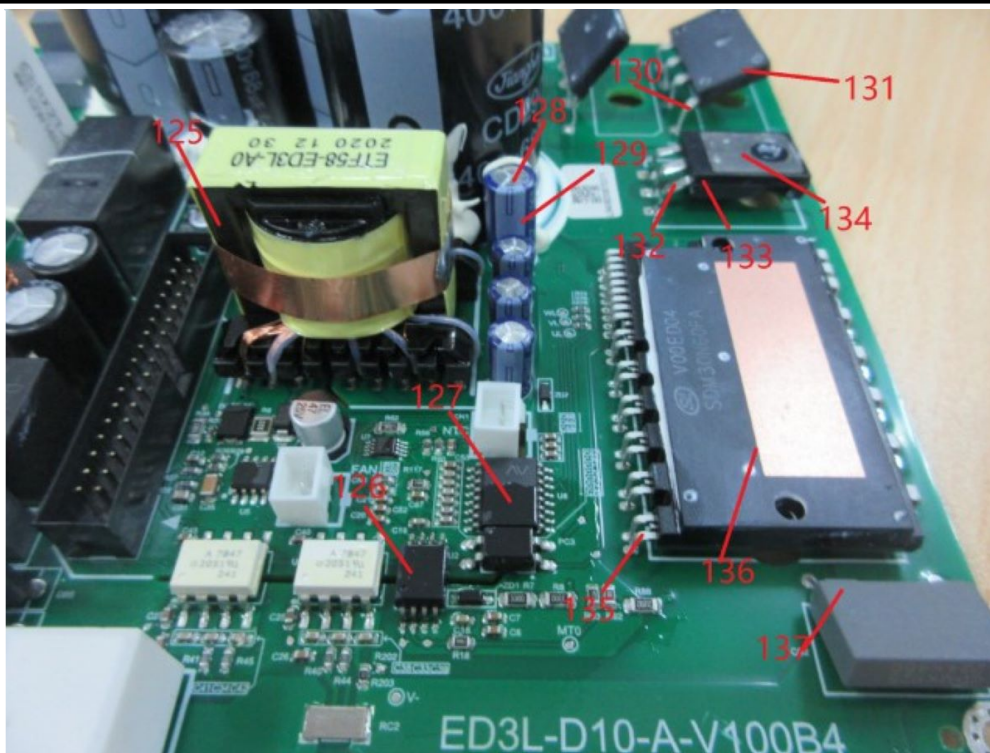
**Test Report No.: 244378056a 001**

Page 37 of 148

Material No.	Cd	Cr	Pb	Hg	Br
M090	< RL	< RL	< RL	< RL	< RL
M091	< RL	< RL	< RL	< RL	< RL
M092	< RL	< RL	< RL	< RL	n.a.
M093	< RL	< RL	< RL	< RL	n.a.
M094	< RL	< RL	< RL	< RL	n.a.
M095	< RL	< RL	< RL	< RL	n.a.
M096	< RL	< RL	< RL	< RL	n.a.
M097	< RL	< RL	< RL	< RL	d*2
M098	< RL	< RL	< RL	< RL	d*2
M099	< RL	< RL	< RL	< RL	n.a.
M100	< RL	< RL	< RL	< RL	< RL
M101	< RL	< RL	< RL	< RL	d*2
M102	< RL	< RL	< RL	< RL	d*2
M103	< RL	< RL	< RL	< RL	n.a.
M104	< RL	< RL	< RL	< RL	d*2
M105	< RL	< RL	< RL	< RL	d*2
M106	< RL	< RL	< RL	< RL	n.a.
M107	< RL	< RL	< RL	< RL	< RL
M108	< RL	< RL	< RL	< RL	n.a.
M109	< RL	< RL	< RL	< RL	d*2

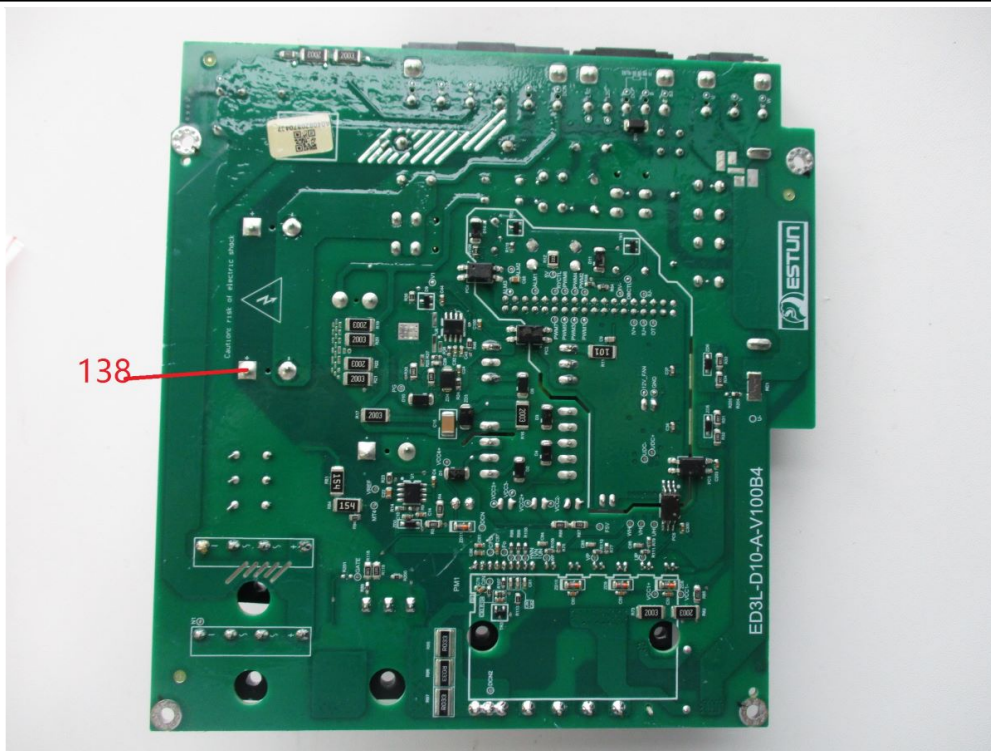


Material No.	Cd	Cr	Pb	Hg	Br
M110	< RL	< RL	< RL	< RL	n.a.
M111	< RL	< RL	< RL	< RL	n.a.
M112	< RL	< RL	< RL	< RL	n.a.
M113	< RL	< RL	< RL	< RL	n.a.
M114	< RL	< RL	< RL	< RL	d*2
M115	< RL	< RL	< RL	< RL	< RL
M116	< RL	< RL	< RL	< RL	< RL
M117	< RL	< RL	< RL	< RL	n.a.
M118	< RL	< RL	< RL	< RL	n.a.
M119	< RL	< RL	< RL	< RL	< RL
M120	< RL	< RL	< RL	< RL	n.a.
M121	< RL	< RL	< RL	< RL	< RL
M122	< RL	< RL	< RL	< RL	n.a.
M123	< RL	< RL	< RL	< RL	< RL
M124	< RL	< RL	< RL	< RL	< RL



Material No.	Cd	Cr	Pb	Hg	Br
M125	< RL	< RL	< RL	< RL	n.a.
M126	< RL	< RL	< RL	< RL	< RL
M127	< RL	< RL	< RL	< RL	< RL
M128	< RL	< RL	< RL	< RL	n.a.
M129	< RL	< RL	< RL	< RL	< RL
M130	< RL	< RL	< RL	< RL	n.a.
M131	< RL	< RL	< RL	< RL	< RL
M132	< RL	< RL	< RL	< RL	n.a.
M133	< RL	< RL	< RL	< RL	< RL
M134	< RL	< RL	< RL	< RL	n.a.
M135	< RL	< RL	< RL	< RL	n.a.
M136	< RL	< RL	< RL	< RL	< RL
M137	< RL	< RL	< RL	< RL	d*2

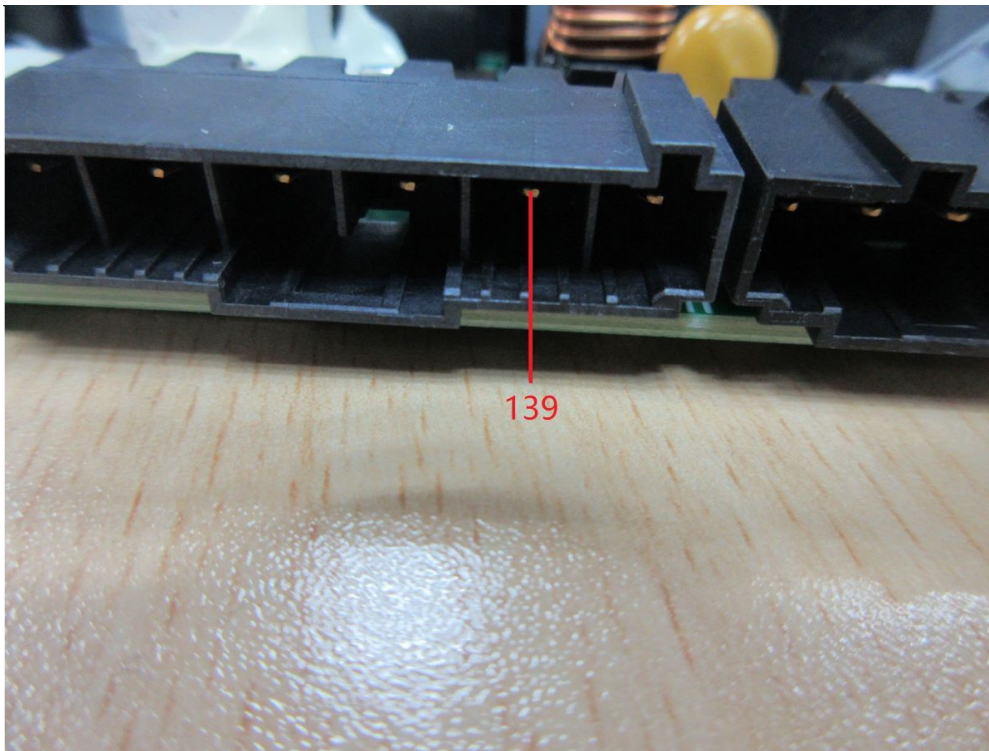
**Test Report No.: 244378056a 001** Page 40 of 148



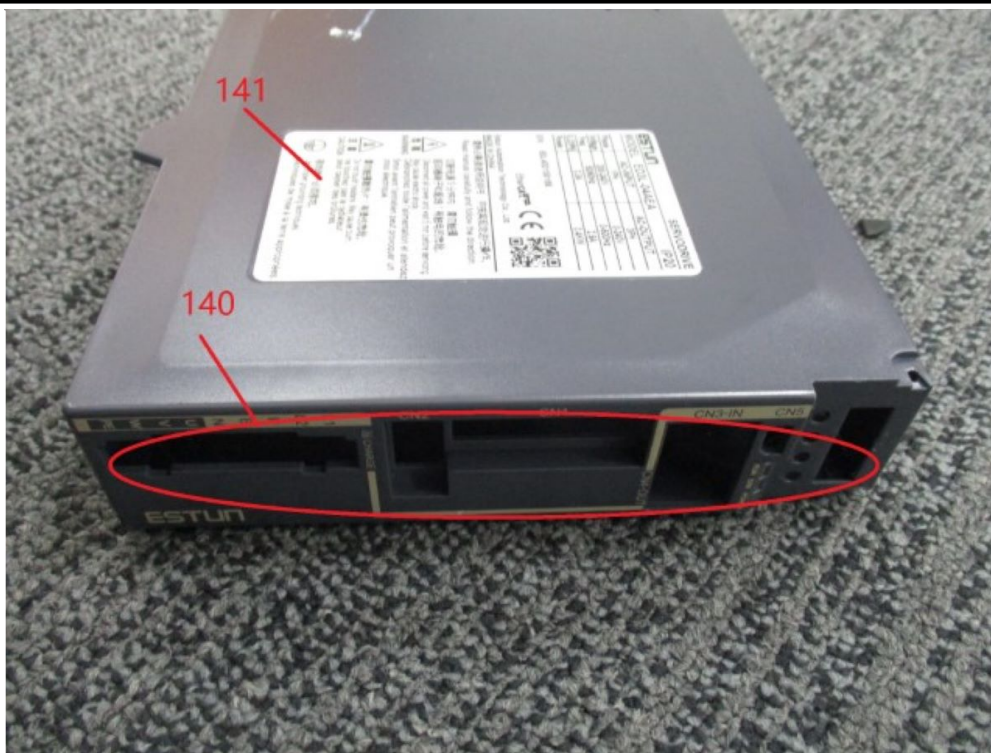
Material No.	Cd	Cr	Pb	Hg	Br
M138	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001**

Page 41 of 148



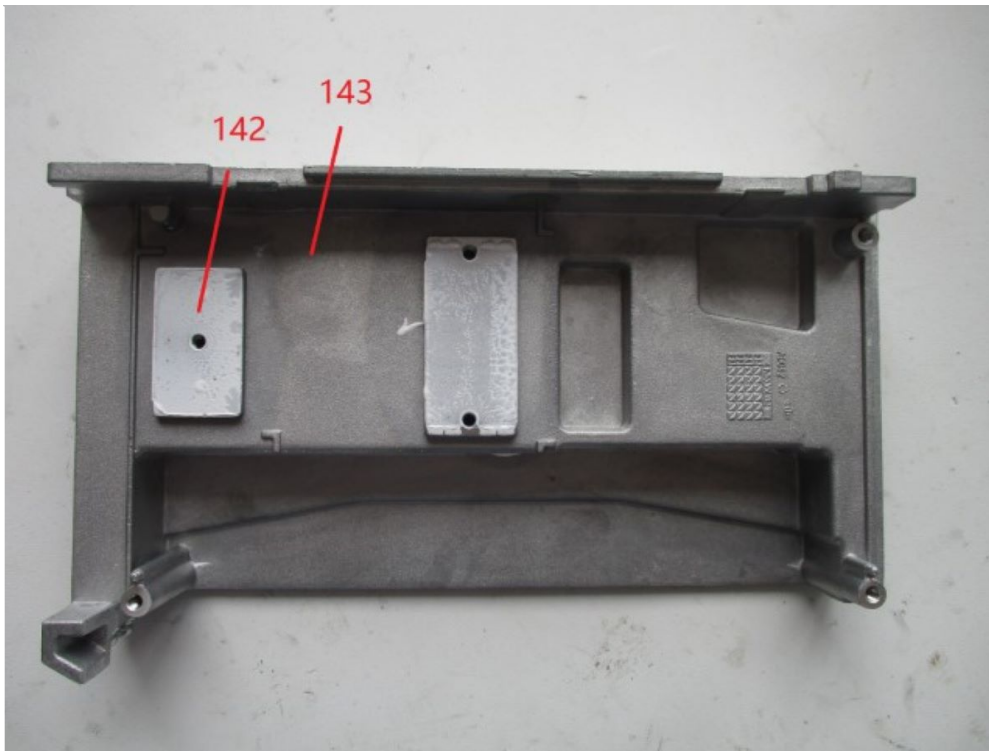
Material No.	Cd	Cr	Pb	Hg	Br
M139	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M140	< RL	< RL	< RL	< RL	< RL
M141	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

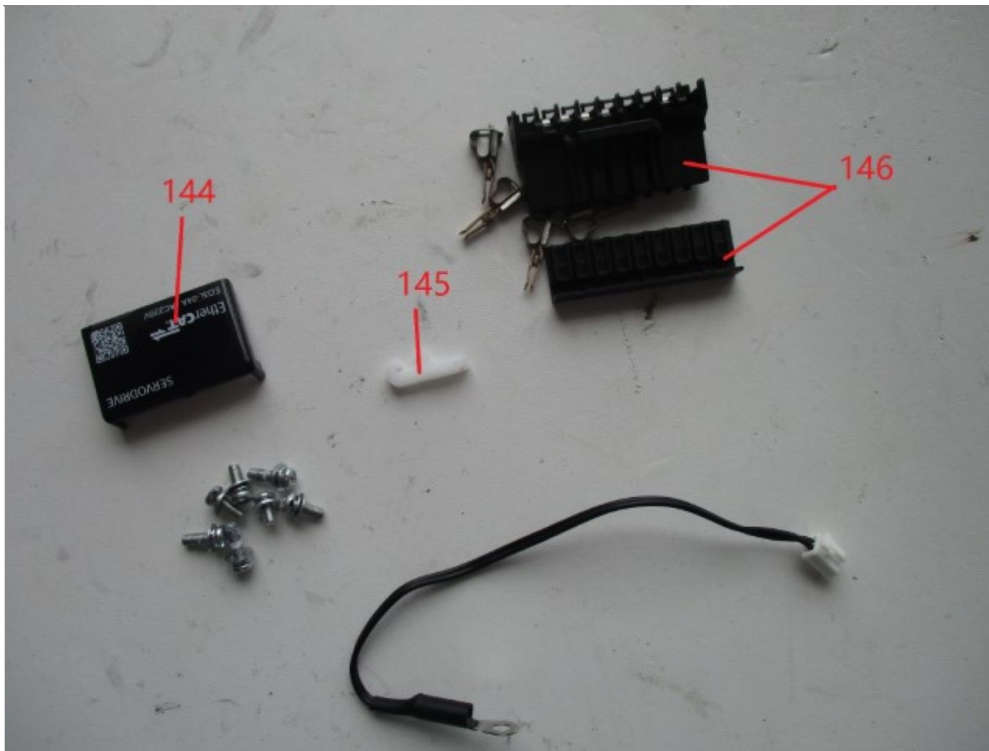
Page 43 of 148



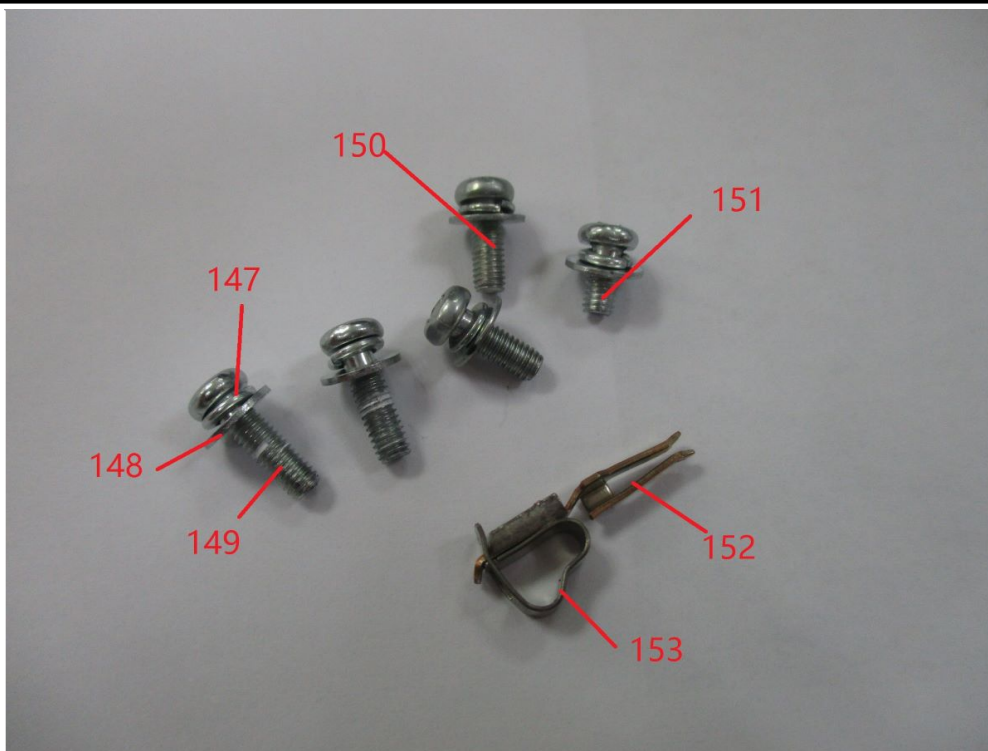
Material No.	Cd	Cr	Pb	Hg	Br
M142	< RL	< RL	< RL	< RL	< RL
M143	< RL	d*2	< RL	< RL	n.a.

**Test Report No.: 244378056a 001**

Page 44 of 148



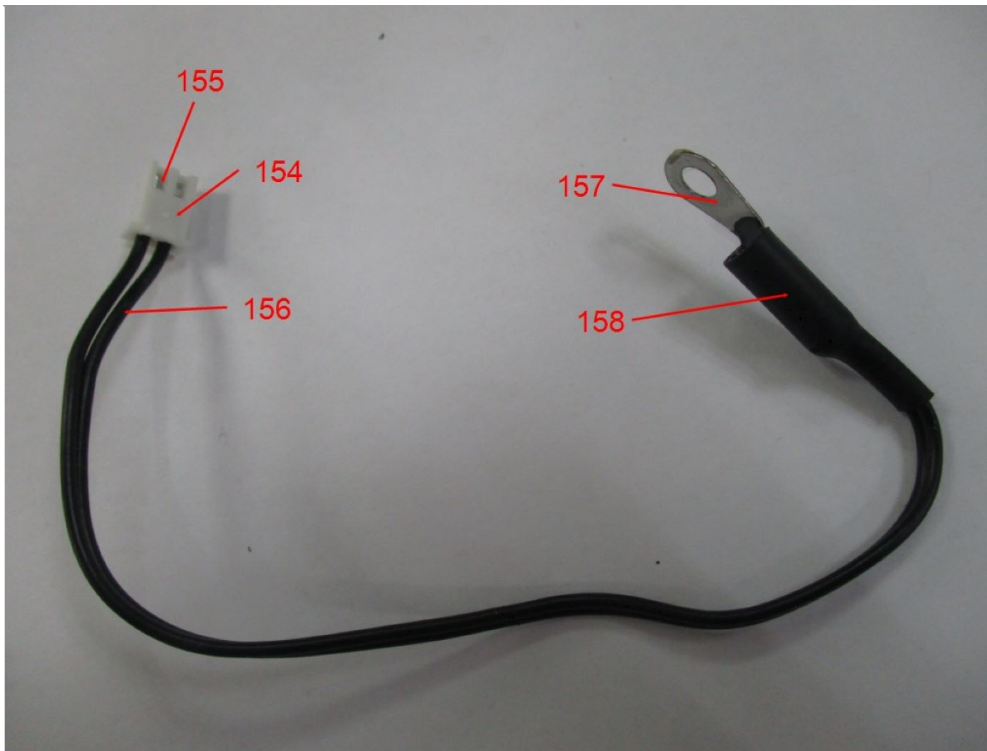
Material No.	Cd	Cr	Pb	Hg	Br
M144	< RL	< RL	< RL	< RL	< RL
M145	< RL	< RL	< RL	< RL	< RL
M146	< RL	< RL	< RL	< RL	d*2



Material No.	Cd	Cr	Pb	Hg	Br
M147	< RL	d*2	< RL	< RL	n.a.
M148	< RL	d*2	< RL	< RL	n.a.
M149	< RL	d*2	< RL	< RL	n.a.
M150	< RL	d*2	< RL	< RL	n.a.
M151	< RL	d*2	< RL	< RL	n.a.
M152	< RL	< RL	< RL	< RL	n.a.
M153	< RL	d*2	< RL	< RL	n.a.

Test Report No.: 244378056a 001

Page 46 of 148

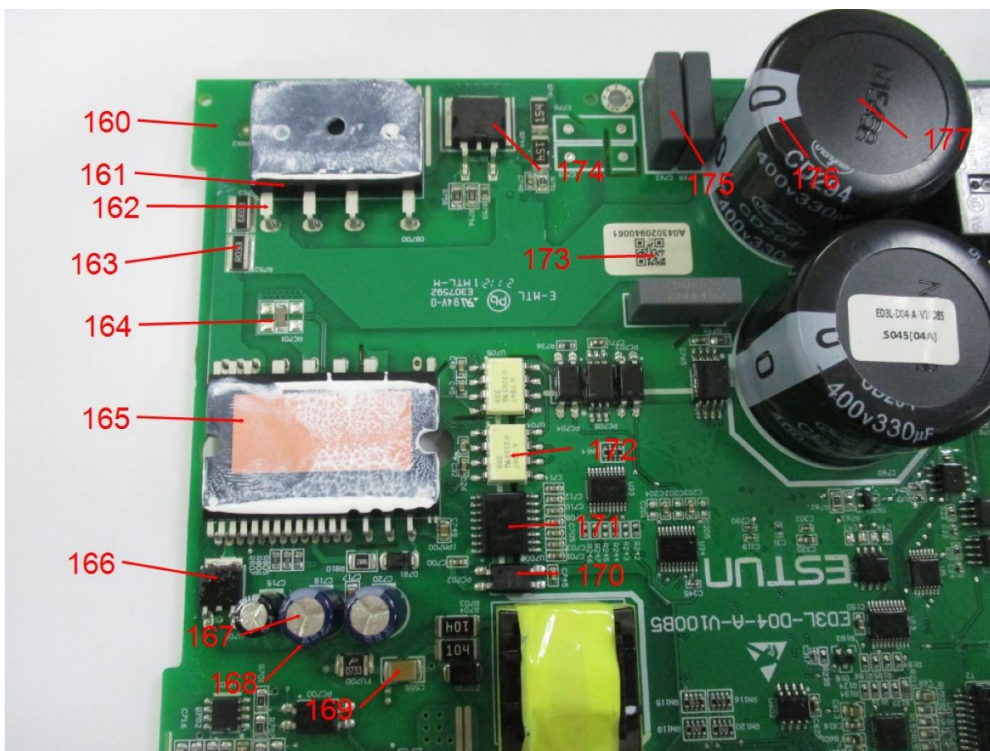


Material No.	Cd	Cr	Pb	Hg	Br
M154	< RL	< RL	< RL	< RL	< RL
M155	< RL	< RL	< RL	< RL	n.a.
M156	< RL	< RL	< RL	< RL	< RL
M157	< RL	d*2	< RL	< RL	n.a.
M158	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001** Page 47 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M159	< RL	< RL	< RL	< RL	n.a.

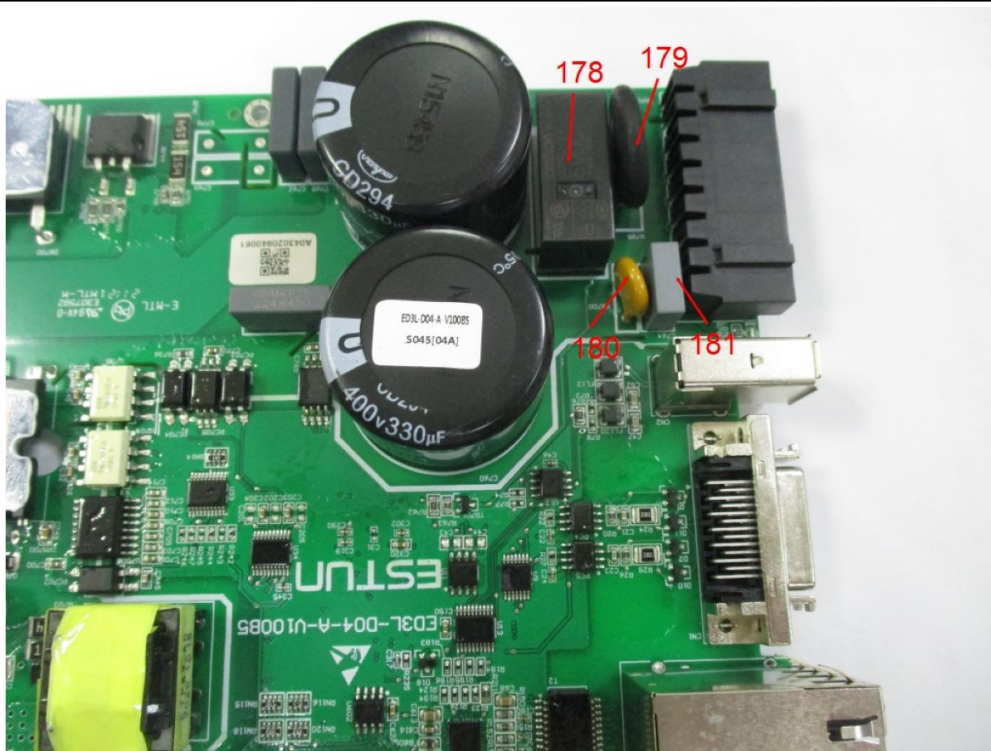


**Test Report No.: 244378056a 001**

Page 48 of 148

Material No.	Cd	Cr	Pb	Hg	Br
M160	< RL	< RL	< RL	< RL	d*2
M161	< RL	< RL	< RL	< RL	d*2
M162	< RL	< RL	< RL	< RL	n.a.
M163	< RL	< RL	< RL	< RL	n.a.
M164	< RL	d*2	< RL	< RL	n.a.
M165	< RL	< RL	< RL	< RL	n.a.
M166	< RL	< RL	< RL	< RL	< RL
M167	< RL	< RL	< RL	< RL	n.a.
M168	< RL	< RL	< RL	< RL	< RL
M169	< RL	< RL	< RL	< RL	n.a.
M170	< RL	< RL	< RL	< RL	< RL
M171	< RL	< RL	< RL	< RL	< RL
M172	< RL	< RL	< RL	< RL	d*2
M173	< RL	< RL	< RL	< RL	< RL
M174	< RL	< RL	< RL	< RL	< RL
M175	< RL	< RL	< RL	< RL	d*2
M176	< RL	< RL	< RL	< RL	< RL
M177	< RL	< RL	< RL	< RL	< RL

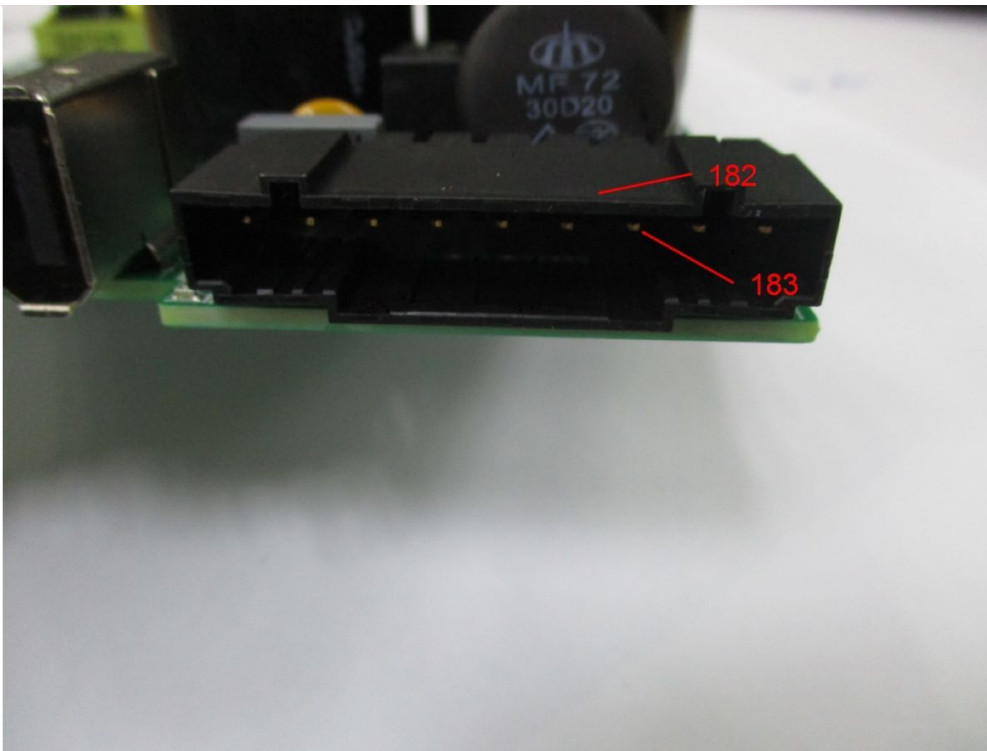
**Test Report No.: 244378056a 001** Page 49 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M178	< RL	< RL	< RL	< RL	d*2
M179	< RL	< RL	< RL	< RL	n.a.
M180	< RL	< RL	< RL	< RL	n.a.
M181	< RL	< RL	< RL	< RL	d*2

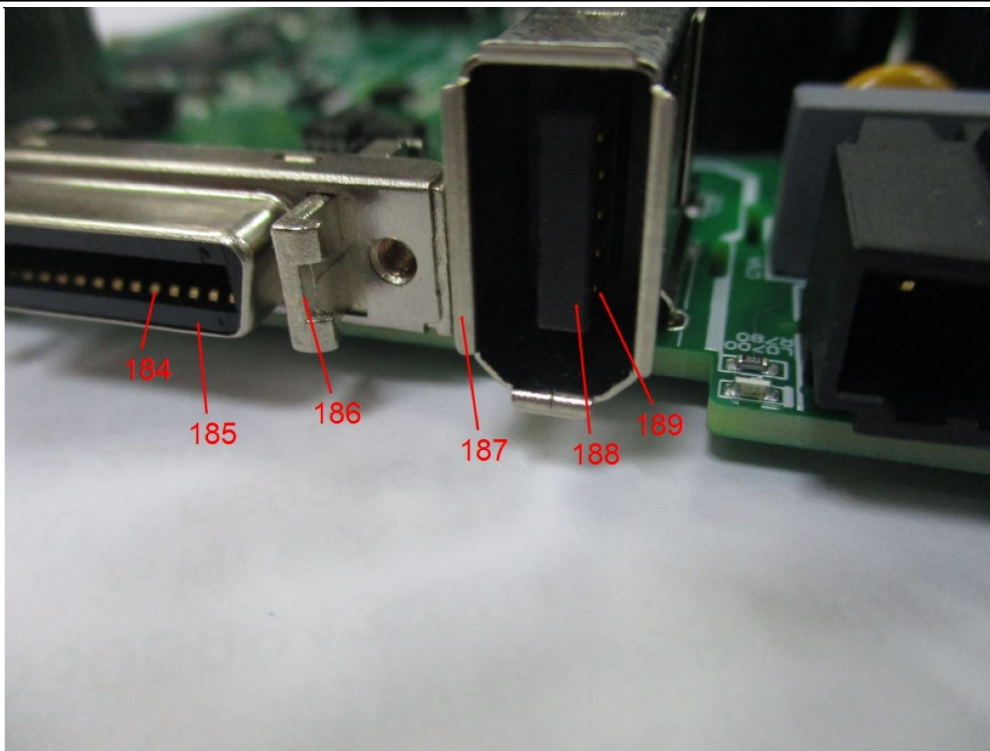
**Test Report No.: 244378056a 001**

Page 50 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M182	< RL	< RL	< RL	< RL	d*2
M183	< RL	< RL	< RL	< RL	n.a.

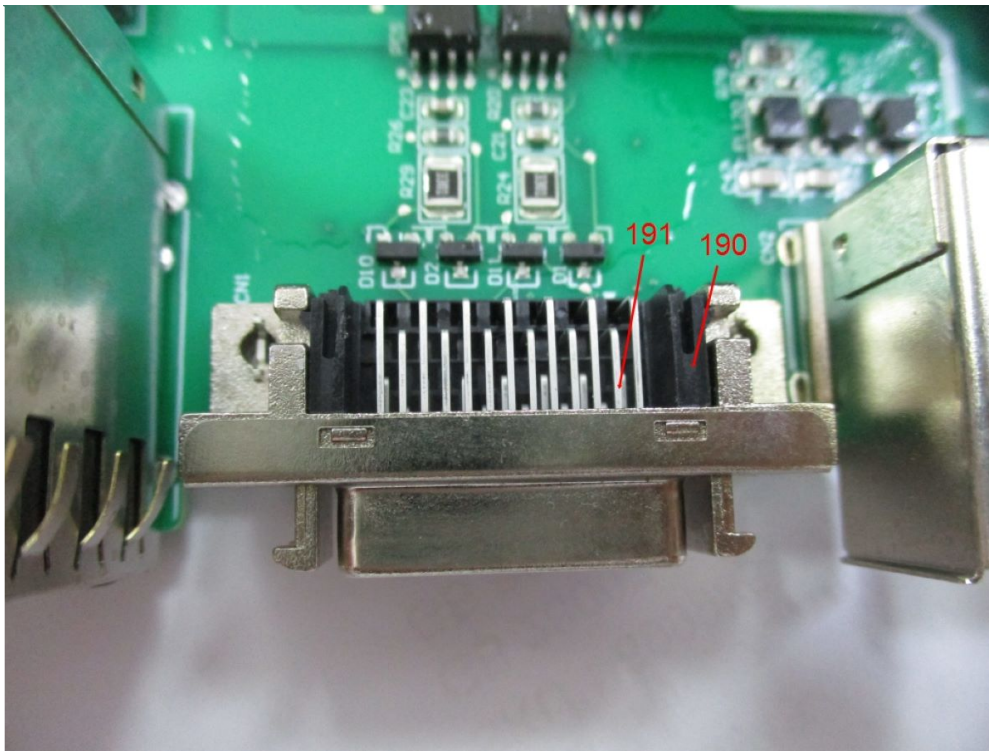
**Test Report No.: 244378056a 001** Page 51 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M184	< RL	< RL	< RL	< RL	n.a.
M185	< RL	< RL	< RL	< RL	d*2
M186	< RL	< RL	< RL	< RL	n.a.
M187	< RL	< RL	< RL	< RL	n.a.
M188	< RL	< RL	< RL	< RL	d*2
M189	< RL	< RL	< RL	< RL	n.a.

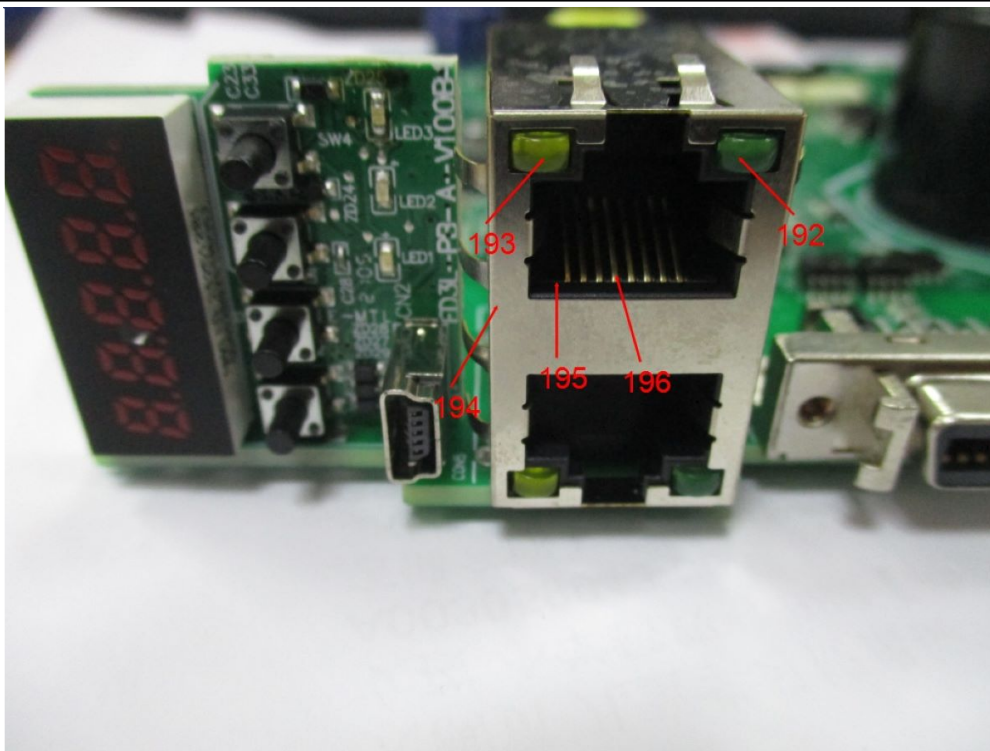
**Test Report No.: 244378056a 001**

Page 52 of 148

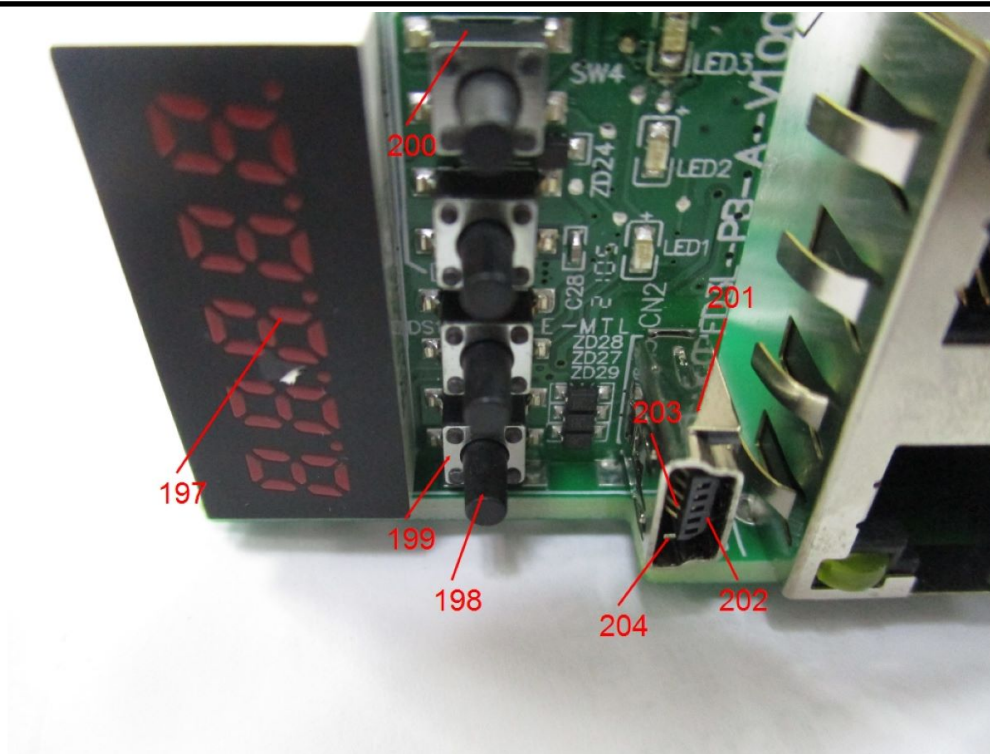


Material No.	Cd	Cr	Pb	Hg	Br
M190	< RL	< RL	< RL	< RL	d*2
M191	< RL	< RL	< RL	< RL	n.a.

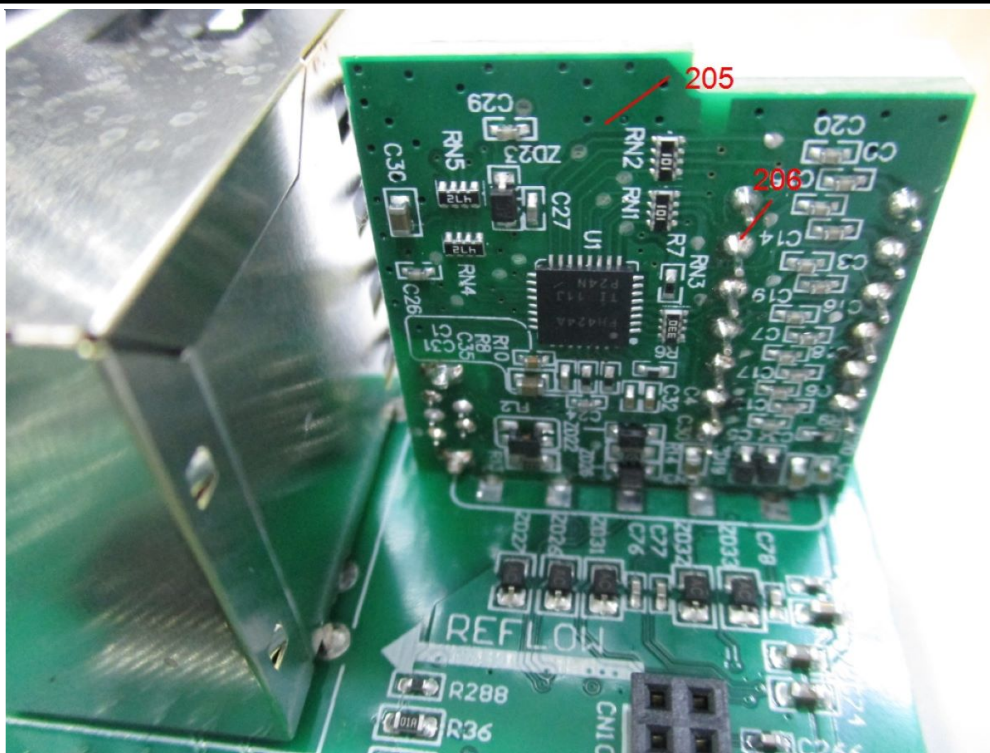
**Test Report No.: 244378056a 001** Page 53 of 148



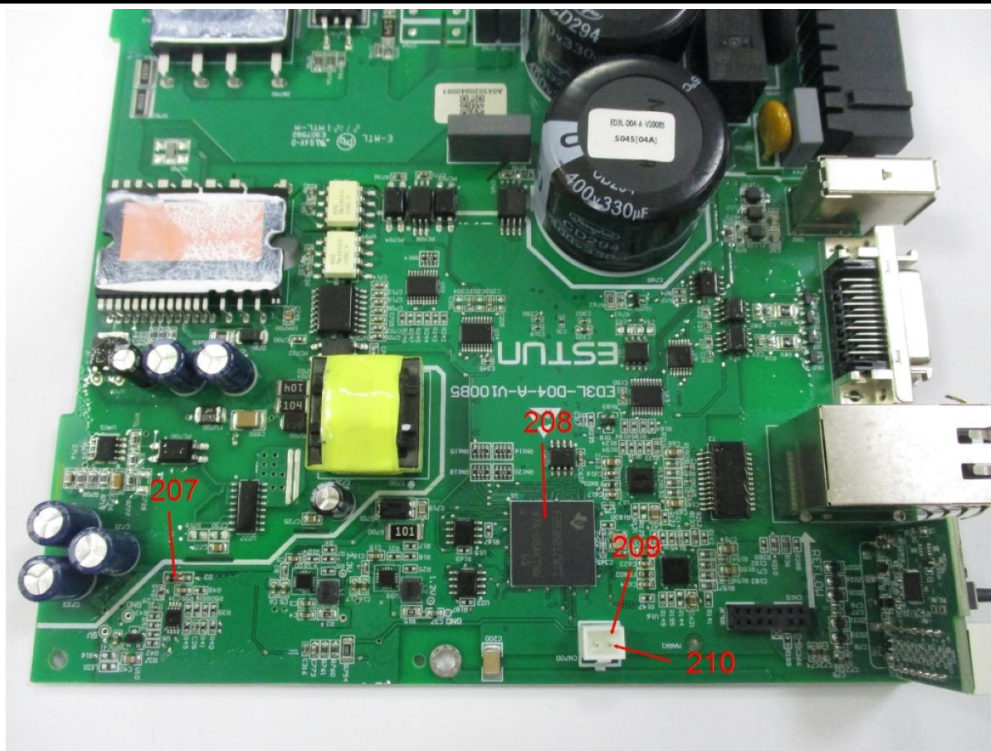
Material No.	Cd	Cr	Pb	Hg	Br
M192	< RL	< RL	< RL	< RL	< RL
M193	< RL	< RL	< RL	< RL	< RL
M194	< RL	< RL	< RL	< RL	n.a.
M195	< RL	< RL	< RL	< RL	d*2
M196	< RL	< RL	< RL	< RL	n.a.



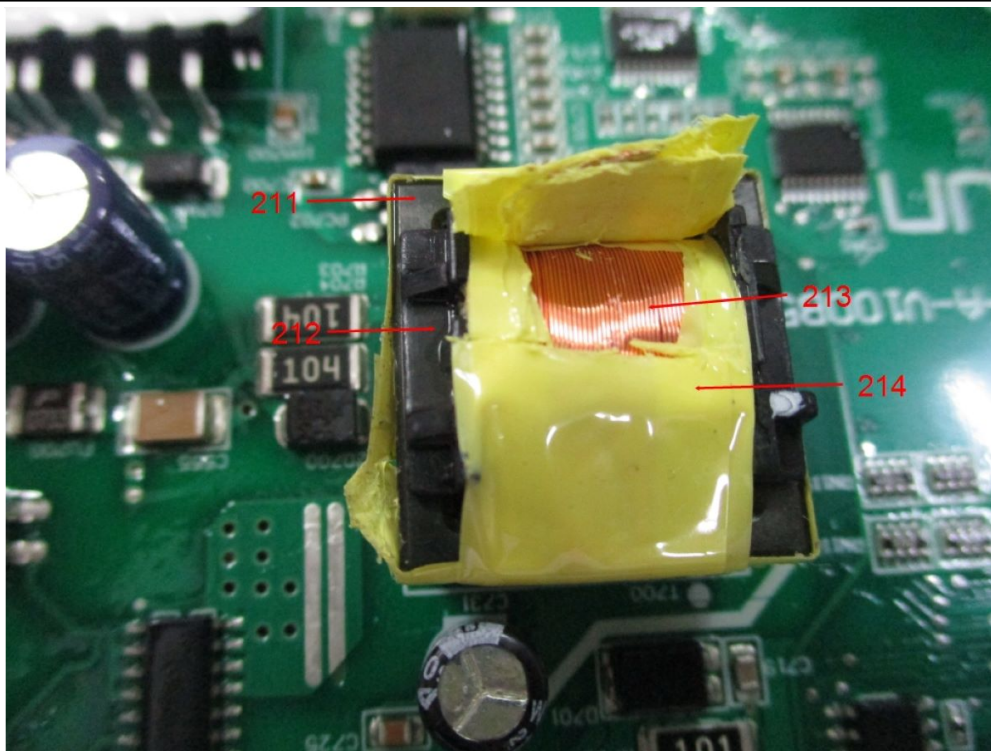
Material No.	Cd	Cr	Pb	Hg	Br
M197	< RL	< RL	< RL	< RL	< RL
M198	< RL	< RL	< RL	< RL	< RL
M199	< RL	d*2	< RL	< RL	n.a.
M200	< RL	< RL	< RL	< RL	< RL
M201	< RL	< RL	< RL	< RL	n.a.
M202	< RL	< RL	< RL	< RL	< RL
M203	< RL	< RL	< RL	< RL	n.a.
M204	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M205	< RL	< RL	< RL	< RL	d*2
M206	< RL	< RL	< RL	< RL	n.a.

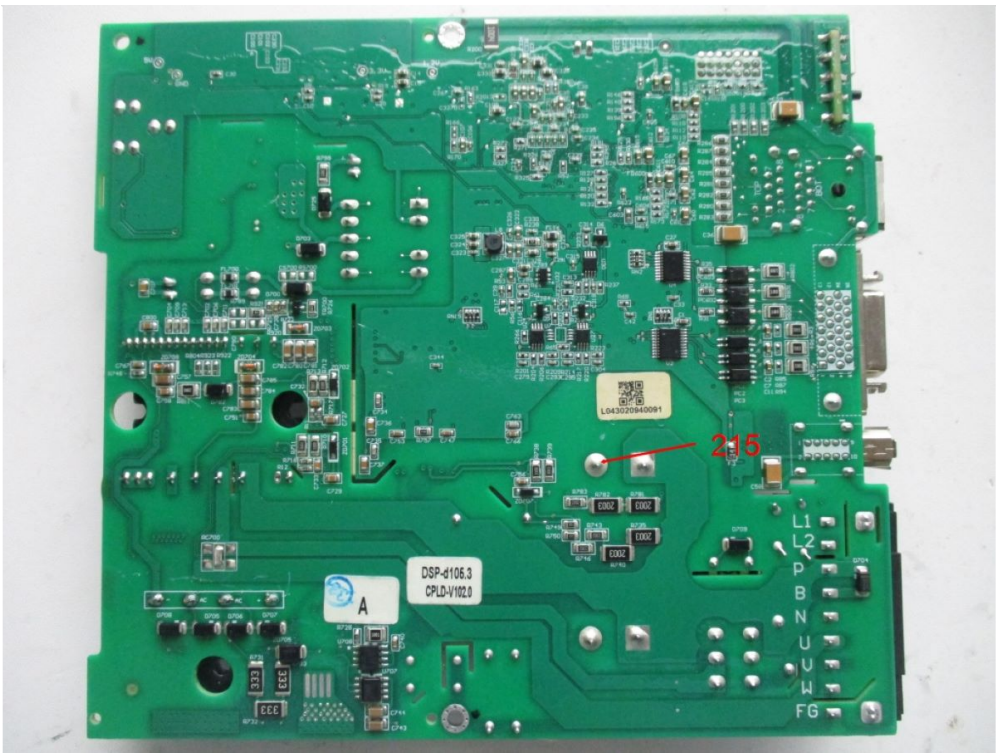


Material No.	Cd	Cr	Pb	Hg	Br
M207	< RL	< RL	d*2	< RL	n.a.
M208	< RL	< RL	< RL	< RL	< RL
M209	< RL	< RL	< RL	< RL	< RL
M210	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M211	< RL	< RL	< RL	< RL	n.a.
M212	< RL	< RL	< RL	< RL	< RL
M213	< RL	< RL	< RL	< RL	n.a.
M214	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001** Page 58 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M215	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M216	< RL	< RL	< RL	< RL	< RL
M217	< RL	< RL	< RL	< RL	< RL

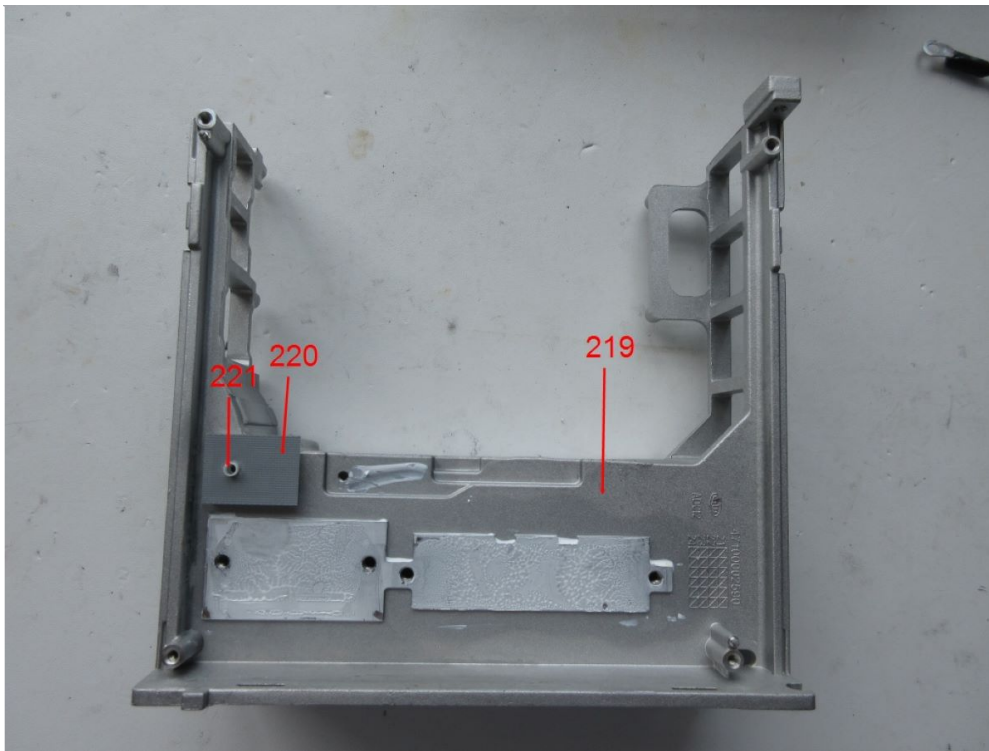
**Test Report No.: 244378056a 001** Page 60 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M218	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

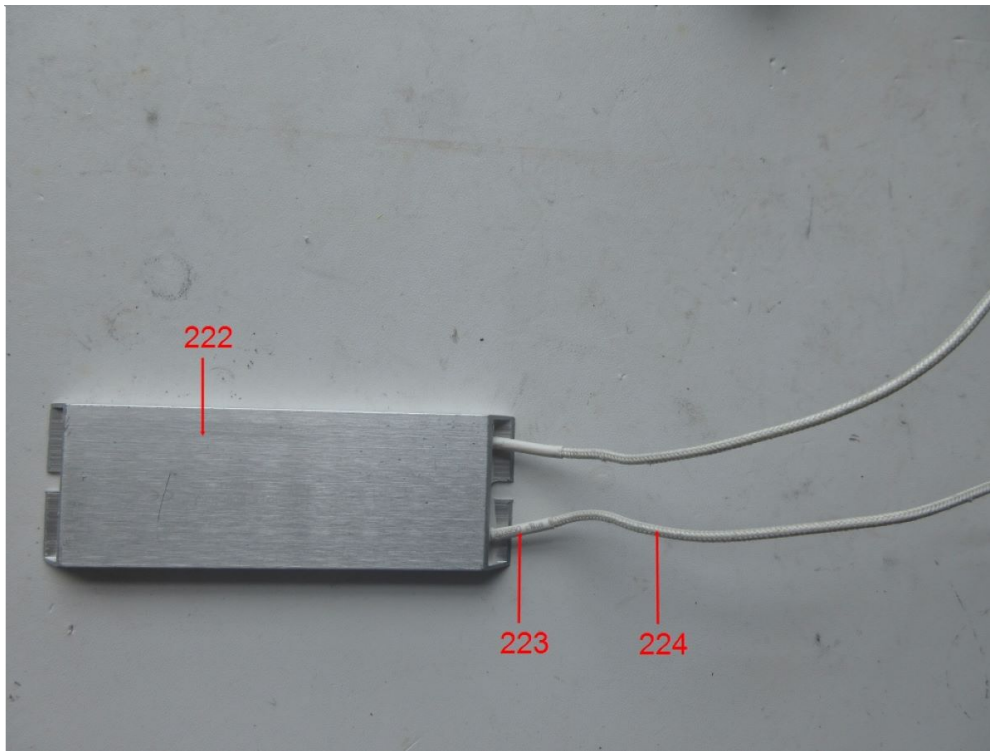
Page 61 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M219	< RL	< RL	< RL	< RL	n.a.
M220	< RL	< RL	< RL	< RL	< RL
M221	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 62 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M222	< RL	< RL	< RL	< RL	n.a.
M223	< RL	< RL	< RL	< RL	< RL
M224	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001** Page 63 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M225	< RL	< RL	< RL	< RL	n.a.



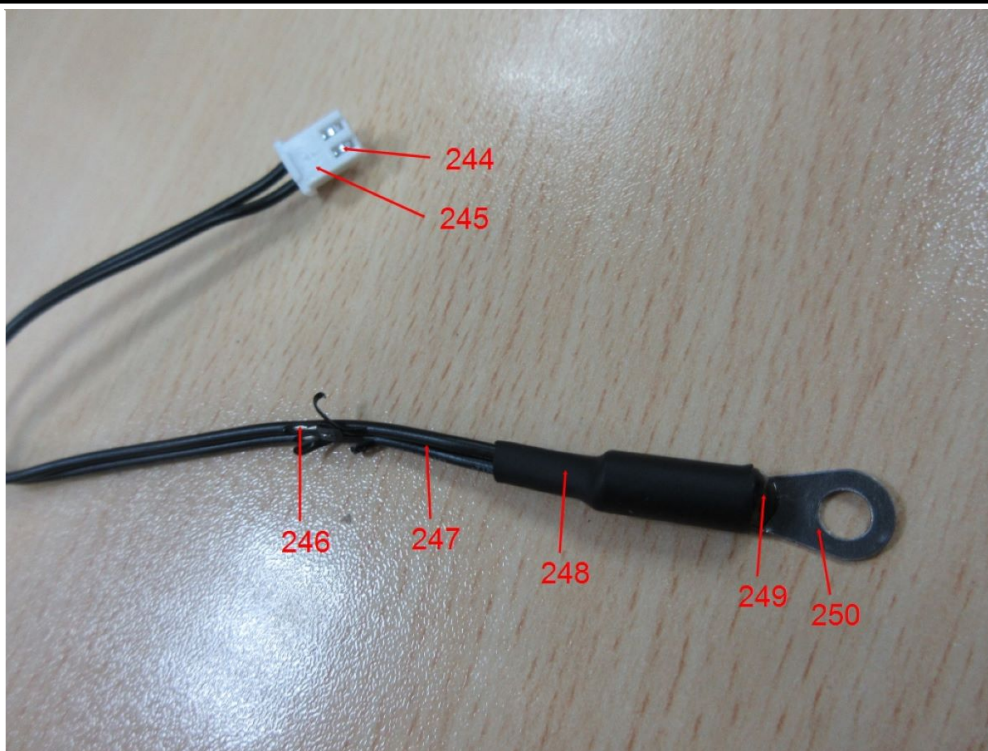
**Test Report No.: 244378056a 001**

Page 64 of 148

Material No.	Cd	Cr	Pb	Hg	Br
M226	< RL	d*2	< RL	< RL	n.a.
M227	< RL	d*2	< RL	< RL	n.a.
M228	< RL	d*2	< RL	< RL	n.a.
M229	< RL	d*2	< RL	< RL	n.a.
M230	< RL	d*2	< RL	< RL	n.a.
M231	< RL	d*2	< RL	< RL	n.a.
M232	< RL	d*2	< RL	< RL	n.a.
M233	< RL	d*2	< RL	< RL	n.a.
M234	< RL	d*2	< RL	< RL	n.a.
M235	< RL	d*2	< RL	< RL	n.a.
M236	< RL	d*2	< RL	< RL	n.a.
M237	< RL	d*2	< RL	< RL	n.a.
M238	< RL	d*2	< RL	< RL	n.a.
M239	< RL	d*2	< RL	< RL	n.a.
M240	< RL	d*2	< RL	< RL	n.a.
M241	< RL	d*2	< RL	< RL	n.a.
M242	< RL	d*2	< RL	< RL	n.a.
M243	< RL	d*2	< RL	< RL	n.a.

**Test Report No.: 244378056a 001**

Page 65 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M244	< RL	< RL	< RL	< RL	n.a.
M245	< RL	< RL	< RL	< RL	< RL
M246	< RL	< RL	< RL	< RL	n.a.
M247	< RL	< RL	< RL	< RL	< RL
M248	< RL	< RL	< RL	< RL	< RL
M249	< RL	< RL	< RL	< RL	< RL
M250	< RL	d*2	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M251	< RL	< RL	< RL	< RL	< RL
M252	< RL	< RL	< RL	< RL	< RL
M253	< RL	< RL	< RL	< RL	d*2
M254	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

Page 67 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M255	< RL	< RL	< RL	< RL	n.a.
M256	< RL	d*2	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M257	< RL	< RL	< RL	< RL	d*2
M258	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 69 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M259	< RL	d*2	< RL	< RL	n.a.
M260	< RL	< RL	< RL	< RL	n.a.

Test Report No.: 244378056a 001

Page 70 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M261	< RL	d*2	< RL	< RL	n.a.
M262	< RL	< RL	< RL	< RL	d*2
M263	< RL	d*2	< RL	< RL	n.a.
M264	< RL	d*2	< RL	< RL	n.a.

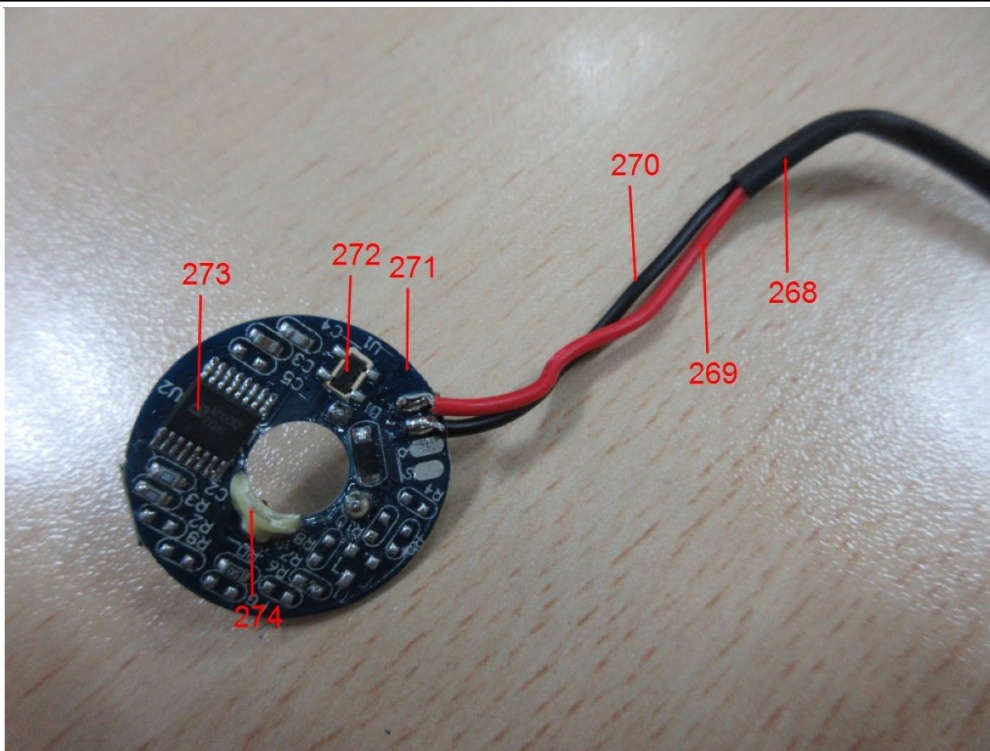
Test Report No.: 244378056a 001

Page 71 of 148

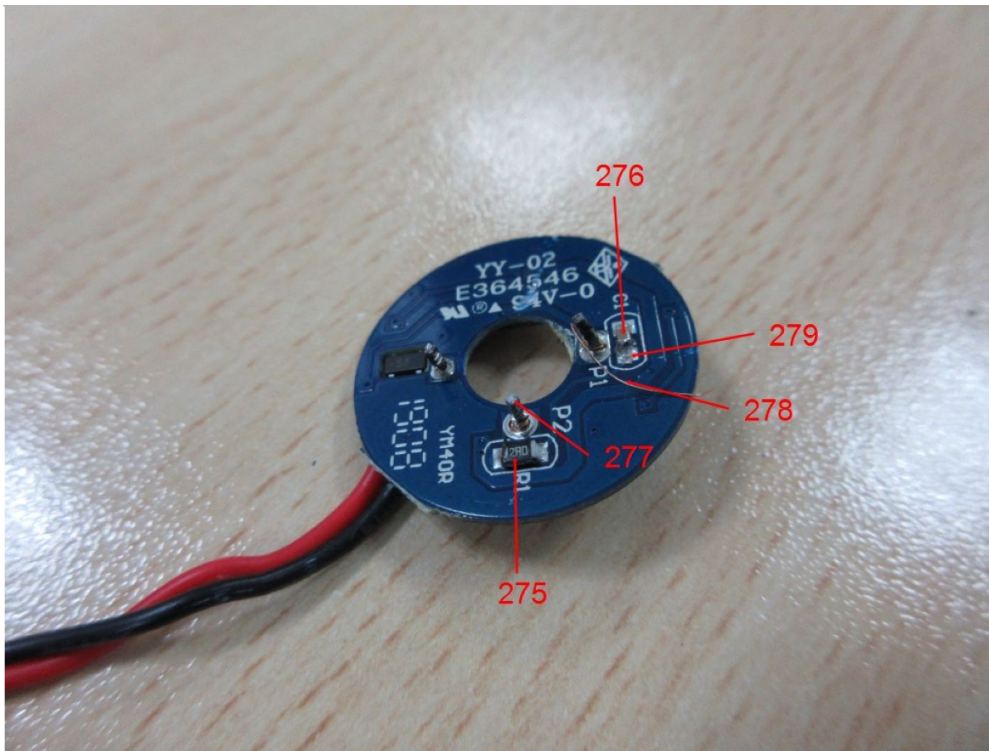


Material No.	Cd	Cr	Pb	Hg	Br
M265	< RL	< RL	< RL	< RL	n.a.
M266	< RL	< RL	< RL	< RL	d*2
M267	< RL	d*2	< RL	< RL	n.a.

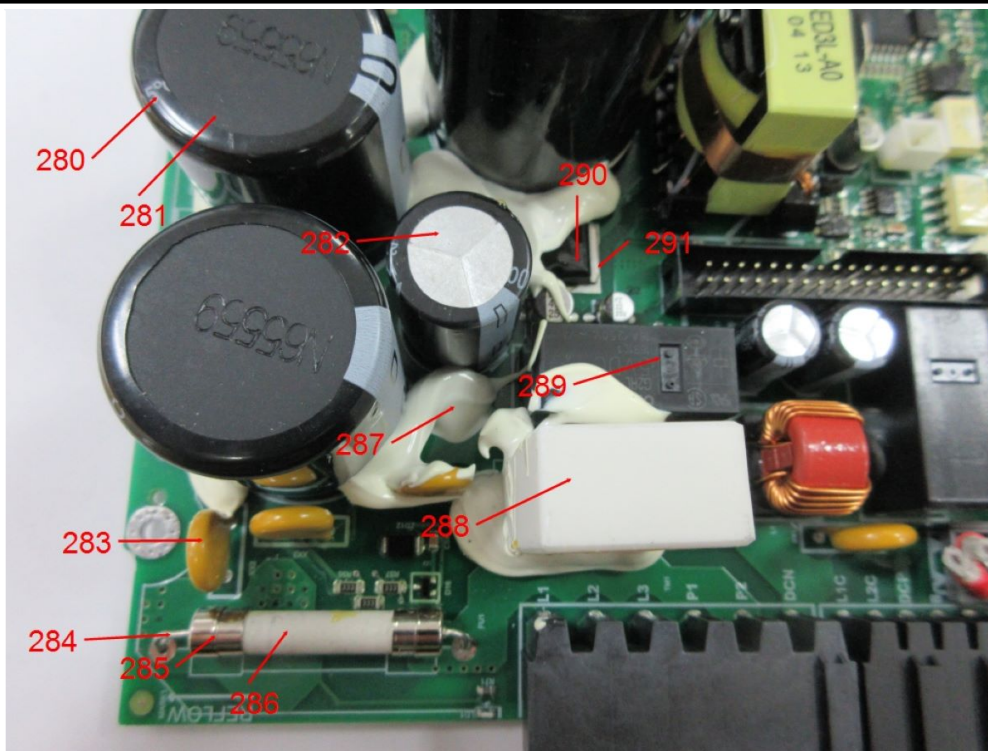
**Test Report No.: 244378056a 001** Page 72 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M268	< RL	< RL	< RL	< RL	< RL
M269	< RL	< RL	< RL	< RL	< RL
M270	< RL	< RL	< RL	< RL	< RL
M271	< RL	< RL	< RL	< RL	d*2
M272	< RL	< RL	< RL	< RL	< RL
M273	< RL	< RL	< RL	< RL	< RL
M274	< RL	< RL	< RL	< RL	< RL

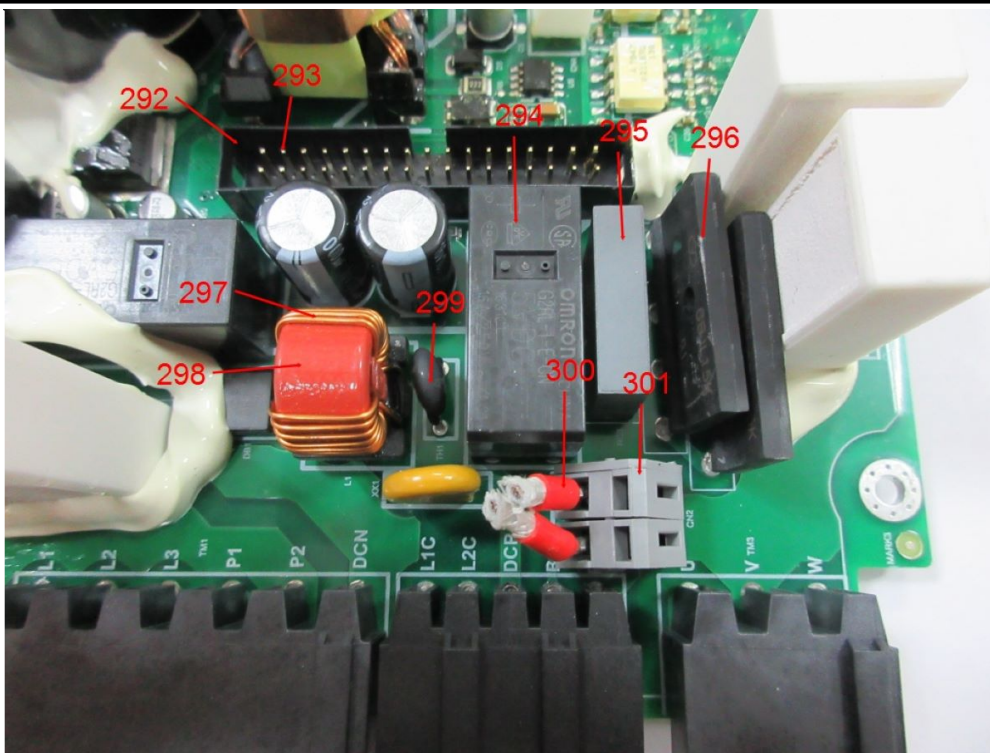


Material No.	Cd	Cr	Pb	Hg	Br
M275	< RL	d*2	< RL	< RL	n.a.
M276	< RL	< RL	< RL	< RL	n.a.
M277	< RL	< RL	< RL	< RL	n.a.
M278	< RL	< RL	< RL	< RL	n.a.
M279	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M280	< RL	< RL	< RL	< RL	< RL
M281	< RL	< RL	< RL	< RL	< RL
M282	< RL	< RL	< RL	< RL	n.a.
M283	< RL	< RL	< RL	< RL	n.a.
M284	< RL	< RL	< RL	< RL	n.a.
M285	< RL	< RL	< RL	< RL	n.a.
M286	< RL	< RL	< RL	< RL	< RL
M287	< RL	< RL	< RL	< RL	< RL
M288	< RL	< RL	< RL	< RL	n.a.
M289	< RL	< RL	< RL	< RL	d*2
M290	< RL	< RL	< RL	< RL	< RL
M291	< RL	< RL	< RL	< RL	n.a.

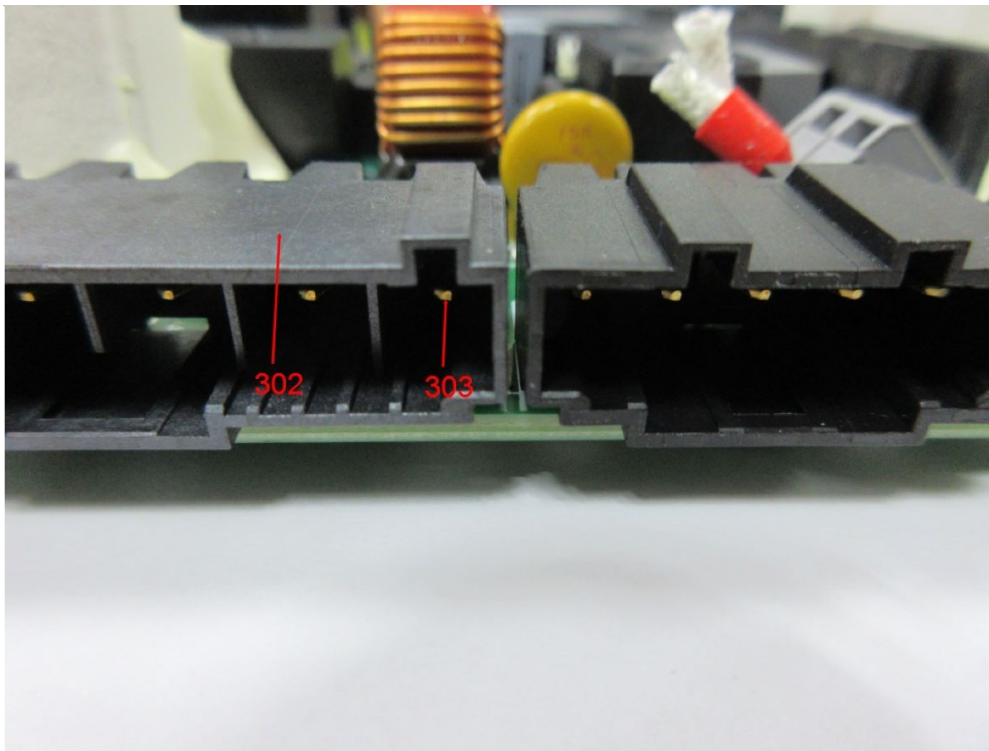
**Test Report No.: 244378056a 001** Page 75 of 148



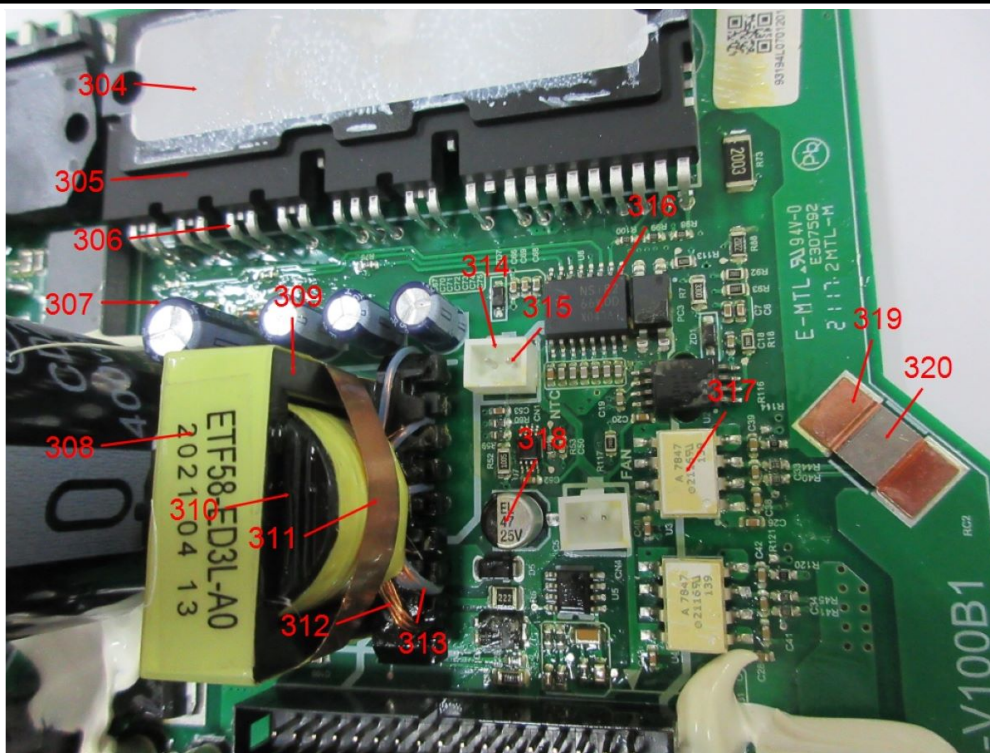
Material No.	Cd	Cr	Pb	Hg	Br
M292	< RL	< RL	< RL	< RL	d*2
M293	< RL	< RL	< RL	< RL	n.a.
M294	< RL	< RL	< RL	< RL	d*2
M295	< RL	< RL	< RL	< RL	d*2
M296	< RL	< RL	< RL	< RL	d*2
M297	< RL	< RL	< RL	< RL	n.a.
M298	< RL	< RL	< RL	< RL	n.a.
M299	< RL	< RL	< RL	< RL	< RL
M300	< RL	< RL	< RL	< RL	d*2
M301	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

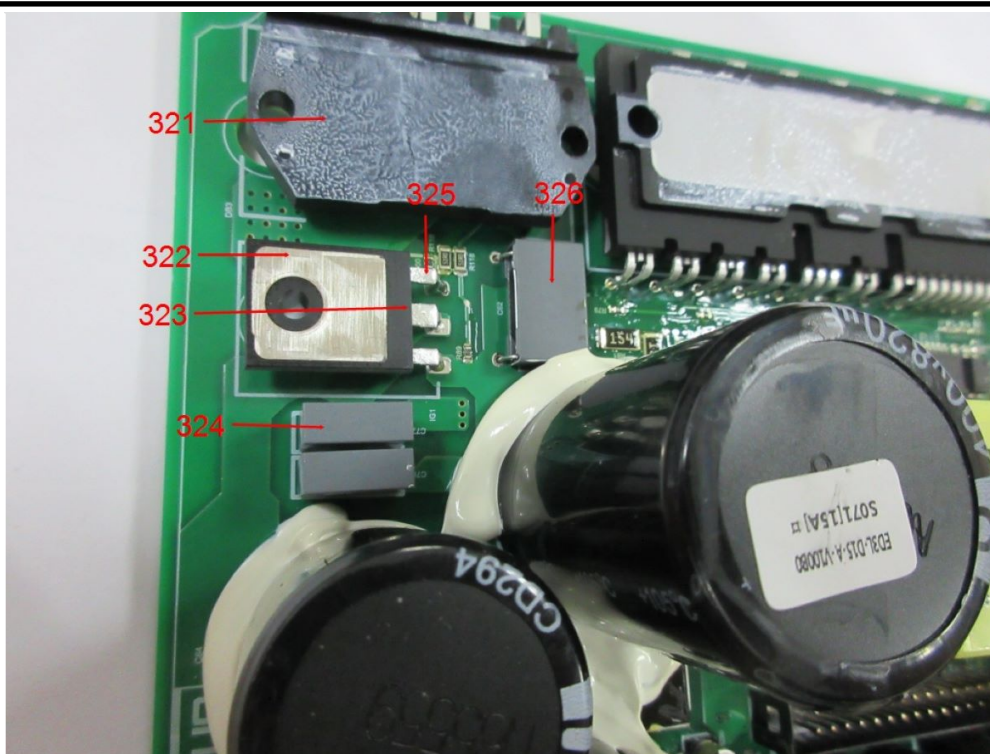
Page 76 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M302	< RL	< RL	< RL	< RL	< RL
M303	< RL	< RL	< RL	< RL	n.a.

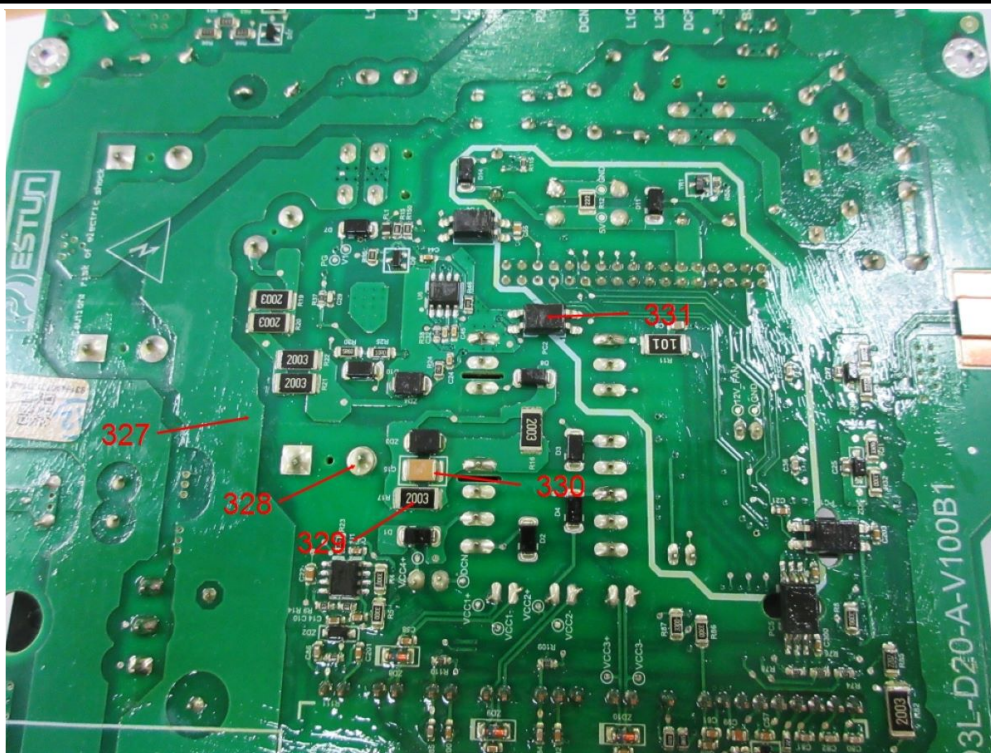


Material No.	Cd	Cr	Pb	Hg	Br
M304	< RL	< RL	< RL	< RL	n.a.
M305	< RL	< RL	< RL	< RL	d*2
M306	< RL	< RL	< RL	< RL	n.a.
M307	< RL	< RL	< RL	< RL	< RL
M308	< RL	< RL	< RL	< RL	< RL
M309	< RL	< RL	< RL	< RL	n.a.
M310	< RL	< RL	< RL	< RL	< RL
M311	< RL	< RL	< RL	< RL	n.a.
M312	< RL	< RL	< RL	< RL	n.a.
M313	< RL	< RL	< RL	< RL	< RL
M314	< RL	< RL	< RL	< RL	< RL
M315	< RL	< RL	< RL	< RL	n.a.
M316	< RL	< RL	< RL	< RL	< RL
M317	< RL	< RL	< RL	< RL	d*2
M318	< RL	< RL	< RL	< RL	n.a.
M319	< RL	d*2	< RL	< RL	n.a.
M320	< RL	d*2	< RL	< RL	n.a.



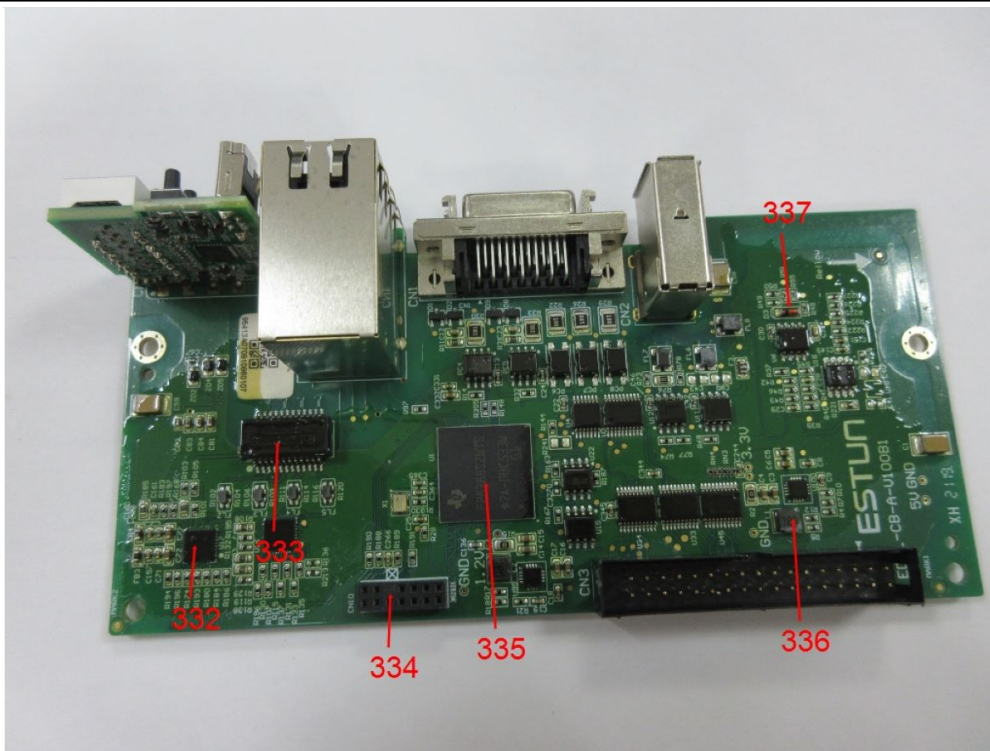
Material No.	Cd	Cr	Pb	Hg	Br
M321	< RL	< RL	< RL	< RL	d*2
M322	< RL	< RL	< RL	< RL	n.a.
M323	< RL	< RL	< RL	< RL	< RL
M324	< RL	< RL	< RL	< RL	d*2
M325	< RL	< RL	< RL	< RL	n.a.
M326	< RL	< RL	< RL	< RL	d*2

**Test Report No.: 244378056a 001** Page 79 of 148



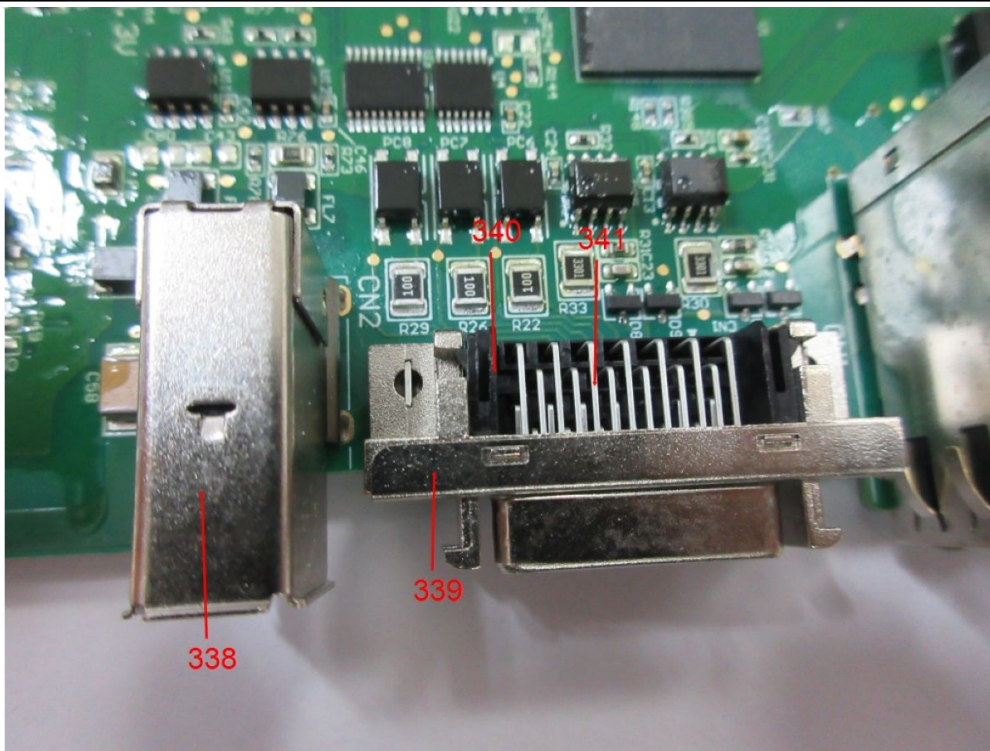
Material No.	Cd	Cr	Pb	Hg	Br
M327	< RL	< RL	< RL	< RL	< RL
M328	< RL	< RL	< RL	< RL	n.a.
M329	< RL	< RL	d*2	< RL	n.a.
M330	< RL	< RL	< RL	< RL	n.a.
M331	< RL	< RL	< RL	< RL	d*2

**Test Report No.: 244378056a 001** Page 80 of 148



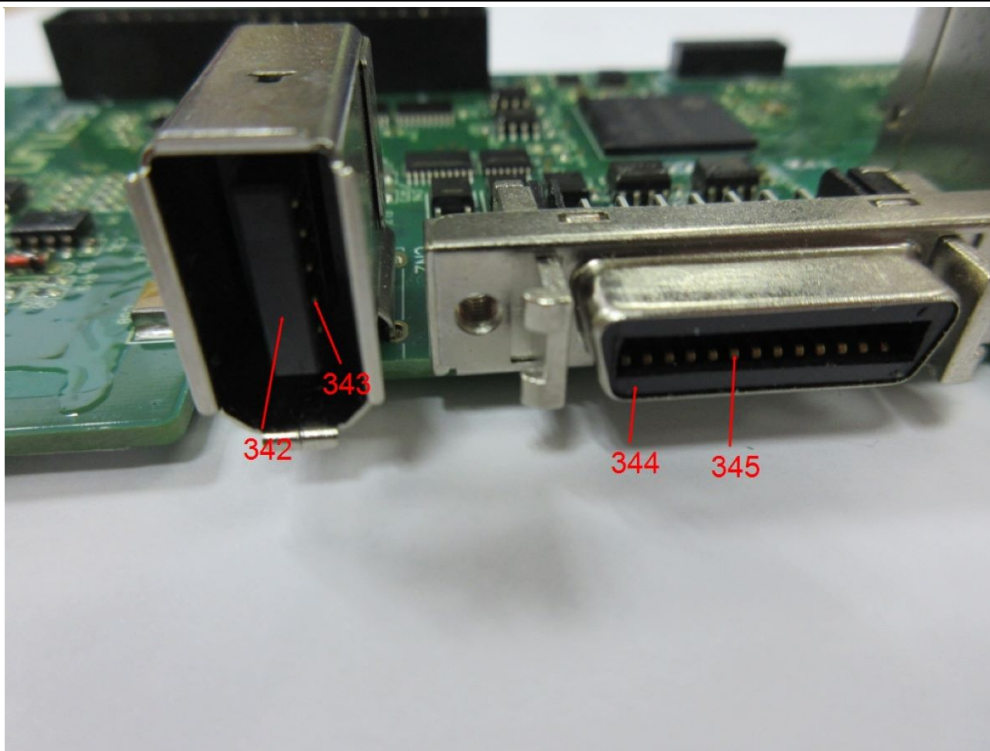
Material No.	Cd	Cr	Pb	Hg	Br
M332	< RL	< RL	< RL	< RL	< RL
M333	< RL	< RL	< RL	< RL	< RL
M334	< RL	< RL	< RL	< RL	d*2
M335	< RL	< RL	< RL	< RL	< RL
M336	< RL	< RL	< RL	< RL	< RL
M337	d*2	< RL	d*2	< RL	n.a.

**Test Report No.: 244378056a 001** Page 81 of 148

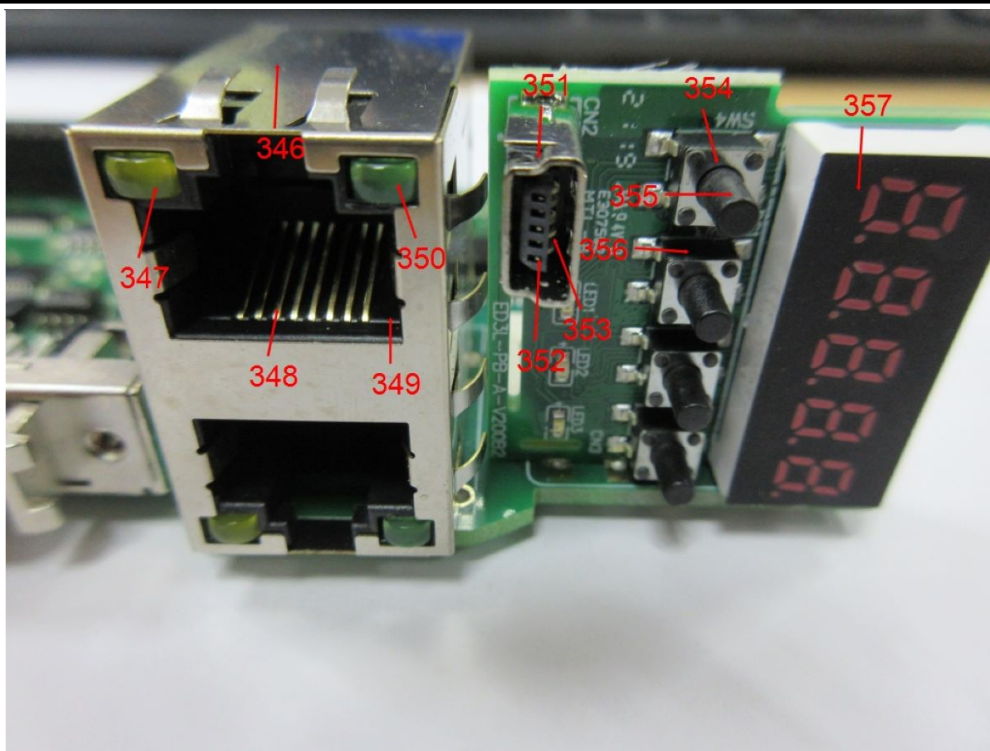


Material No.	Cd	Cr	Pb	Hg	Br
M338	< RL	< RL	< RL	< RL	n.a.
M339	< RL	< RL	< RL	< RL	n.a.
M340	< RL	< RL	< RL	< RL	d*2
M341	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 82 of 148

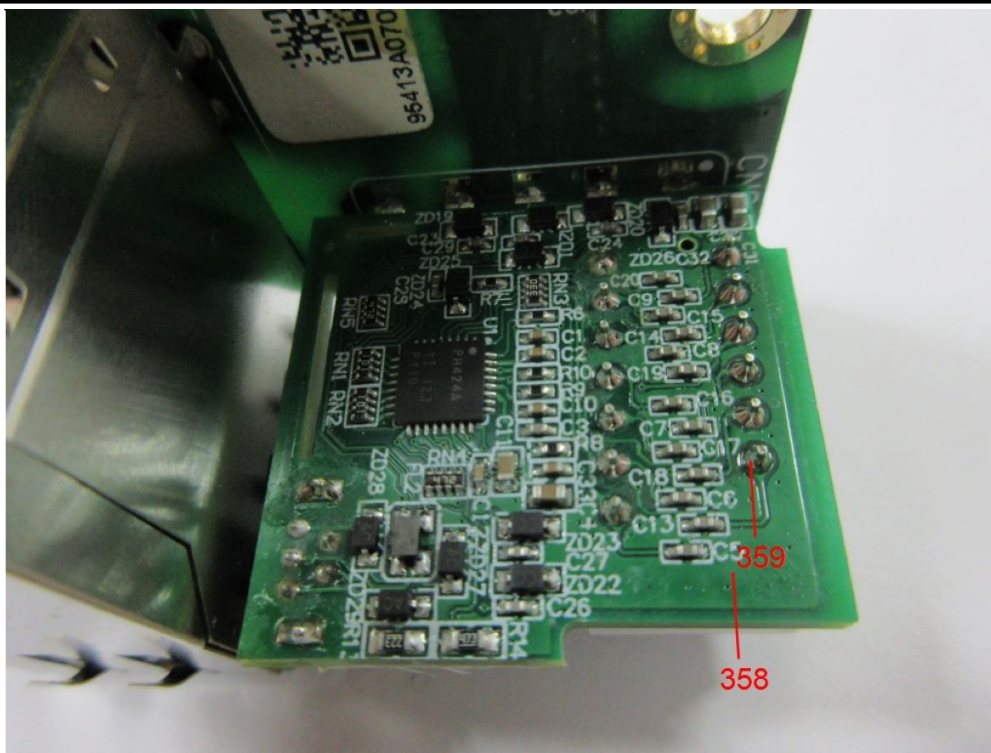


Material No.	Cd	Cr	Pb	Hg	Br
M342	< RL	< RL	< RL	< RL	d*2
M343	< RL	< RL	< RL	< RL	n.a.
M344	< RL	< RL	< RL	< RL	d*2
M345	< RL	< RL	< RL	< RL	n.a.

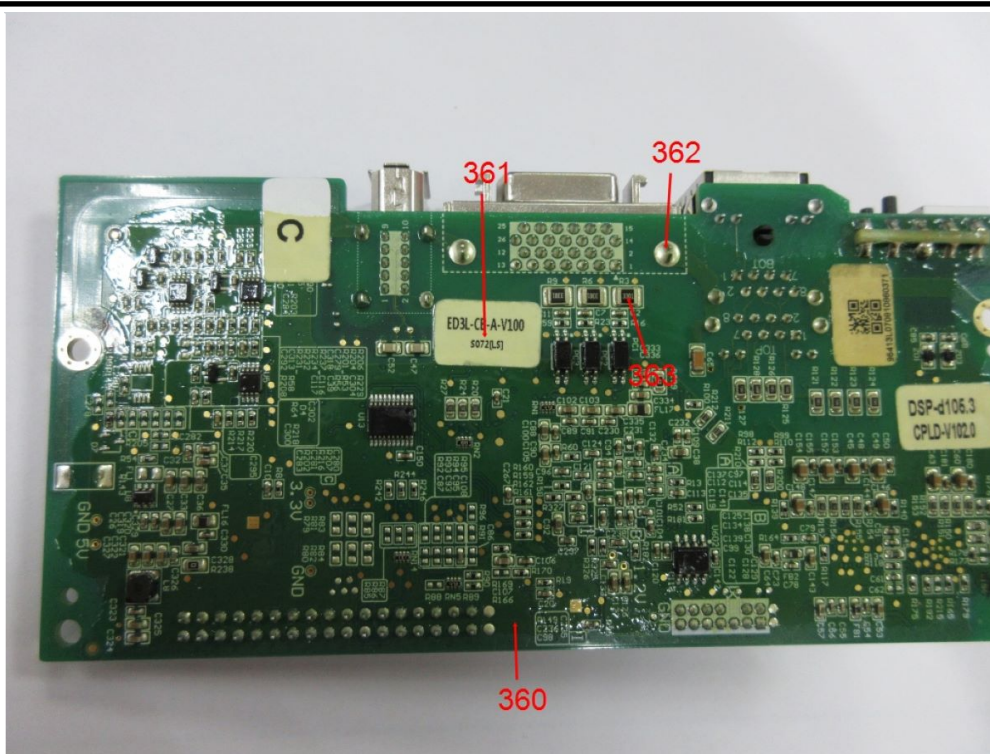


Material No.	Cd	Cr	Pb	Hg	Br
M346	< RL	< RL	< RL	< RL	n.a.
M347	< RL	< RL	< RL	< RL	< RL
M348	< RL	< RL	< RL	< RL	n.a.
M349	< RL	< RL	< RL	< RL	d*2
M350	< RL	< RL	< RL	< RL	< RL
M351	< RL	< RL	< RL	< RL	n.a.
M352	< RL	< RL	< RL	< RL	< RL
M353	< RL	< RL	< RL	< RL	n.a.
M354	< RL	< RL	< RL	< RL	n.a.
M355	< RL	< RL	< RL	< RL	< RL
M356	< RL	< RL	< RL	< RL	< RL
M357	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001** Page 84 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M358	< RL	< RL	< RL	< RL	d*2
M359	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M360	< RL	< RL	< RL	< RL	d*2
M361	< RL	< RL	< RL	< RL	< RL
M362	< RL	< RL	< RL	< RL	n.a.
M363	< RL	< RL	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 86 of 148

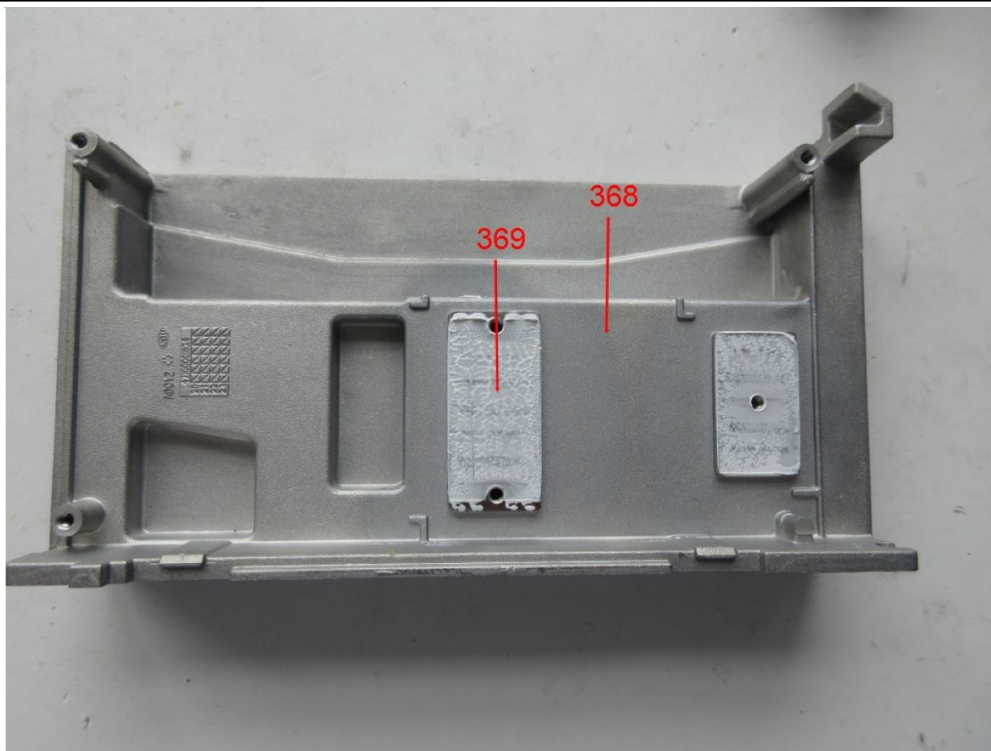


Material No.	Cd	Cr	Pb	Hg	Br
M364	< RL	< RL	< RL	< RL	< RL
M365	< RL	< RL	< RL	< RL	< RL



Material No.	Cd	Cr	Pb	Hg	Br
M366	< RL	< RL	< RL	< RL	< RL
M367	< RL	< RL	< RL	< RL	< RL

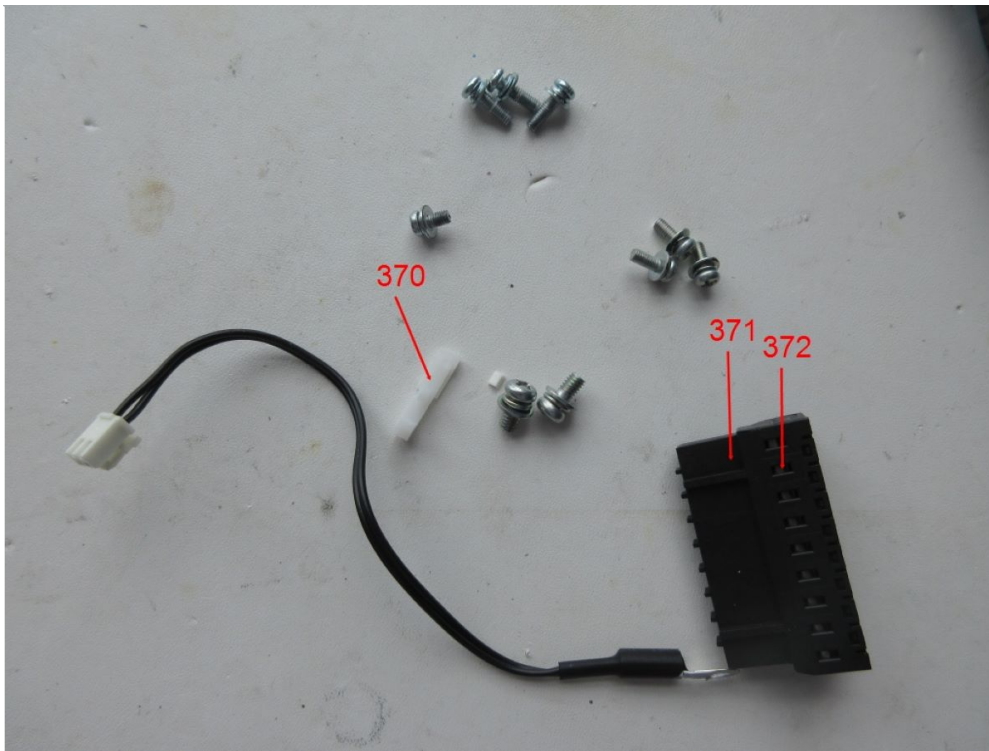
**Test Report No.: 244378056a 001** Page 88 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M368	< RL	< RL	< RL	< RL	n.a.
M369	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

Page 89 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M370	< RL	< RL	< RL	< RL	< RL
M371	< RL	< RL	< RL	< RL	d*2
M372	< RL	d*2	< RL	< RL	n.a.

**Test Report No.: 244378056a 001**

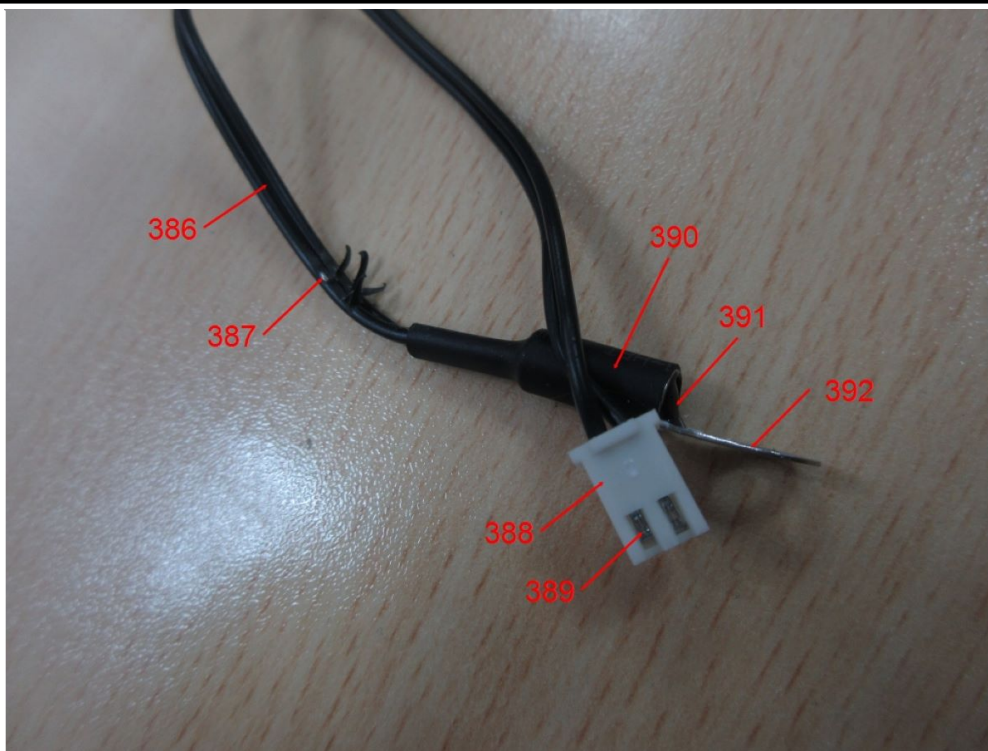
Page 90 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M373	< RL	< RL	< RL	< RL	n.a.

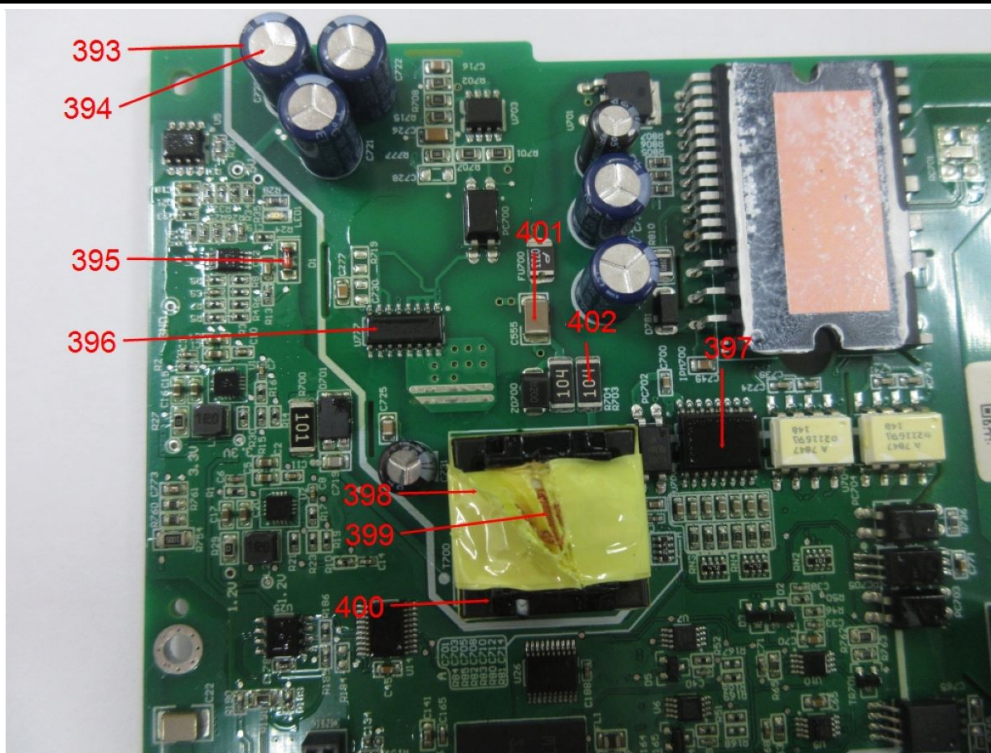


Material No.	Cd	Cr	Pb	Hg	Br
M374	< RL	d*2	< RL	< RL	n.a.
M375	< RL	d*2	< RL	< RL	n.a.
M376	< RL	d*2	< RL	< RL	n.a.
M377	< RL	d*2	< RL	< RL	n.a.
M378	< RL	d*2	< RL	< RL	n.a.
M379	< RL	d*2	< RL	< RL	n.a.
M380	< RL	d*2	< RL	< RL	n.a.
M381	< RL	d*2	< RL	< RL	n.a.
M382	< RL	d*2	< RL	< RL	n.a.
M383	< RL	d*2	< RL	< RL	n.a.
M384	< RL	d*2	< RL	< RL	n.a.
M385	< RL	d*2	< RL	< RL	n.a.



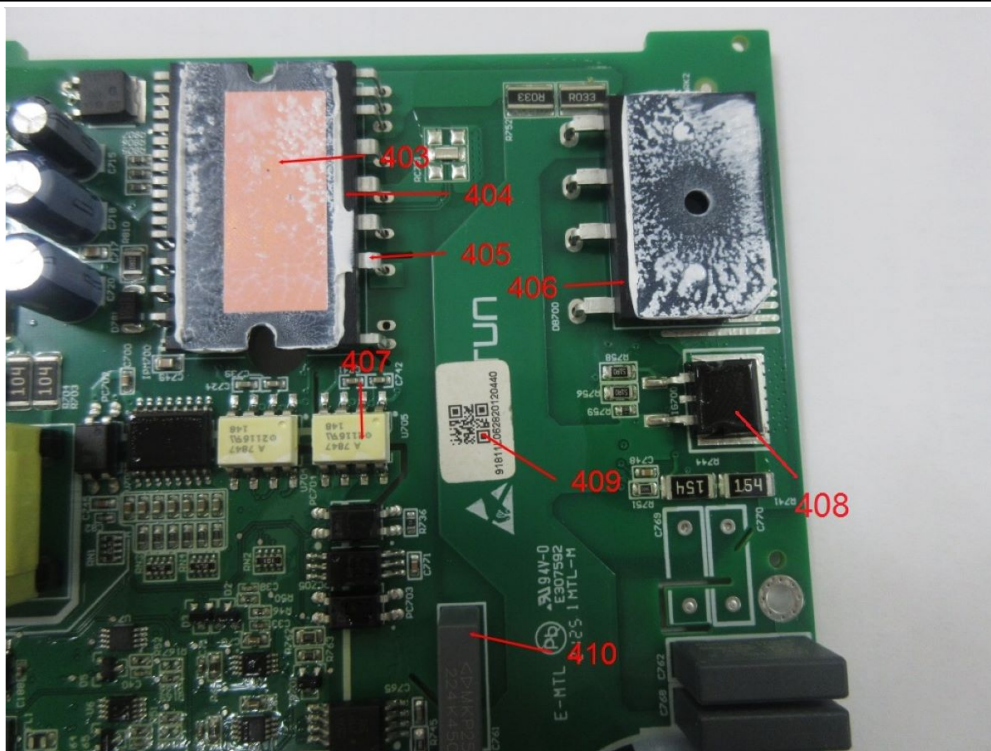
Material No.	Cd	Cr	Pb	Hg	Br
M386	< RL	< RL	< RL	< RL	< RL
M387	< RL	< RL	< RL	< RL	n.a.
M388	< RL	< RL	< RL	< RL	< RL
M389	< RL	< RL	< RL	< RL	n.a.
M390	< RL	< RL	< RL	< RL	< RL
M391	< RL	< RL	< RL	< RL	< RL
M392	< RL	d*2	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 93 of 148



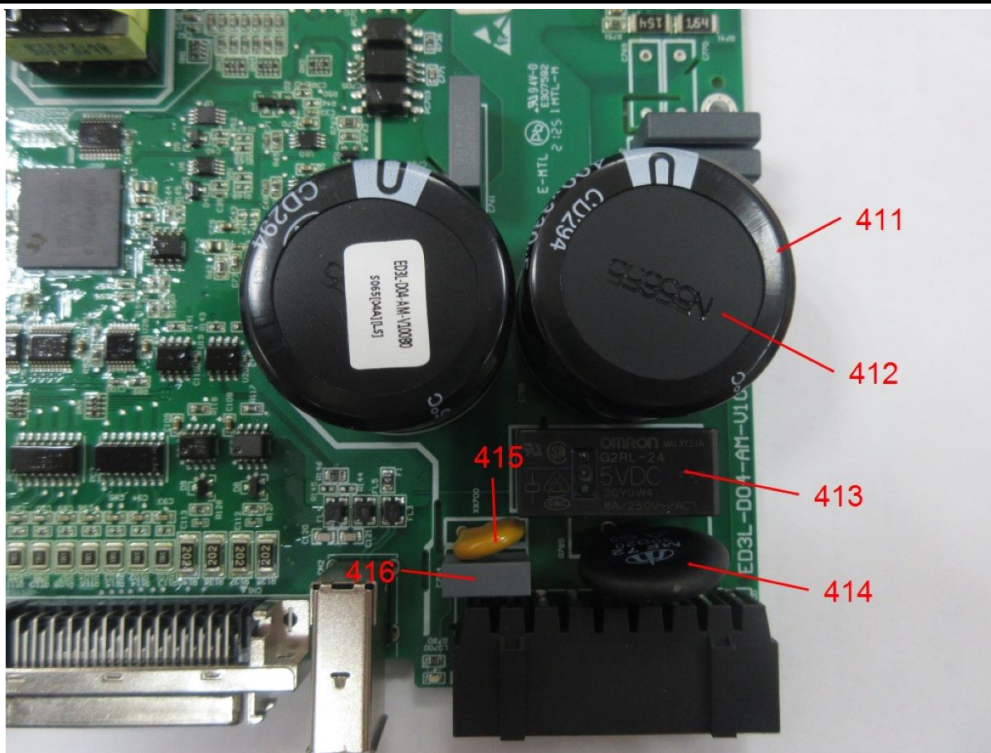
Material No.	Cd	Cr	Pb	Hg	Br
M393	< RL	< RL	< RL	< RL	< RL
M394	< RL	< RL	< RL	< RL	n.a.
M395	d*2	< RL	d*2	< RL	n.a.
M396	< RL	< RL	< RL	< RL	< RL
M397	< RL	< RL	< RL	< RL	< RL
M398	< RL	< RL	< RL	< RL	< RL
M399	< RL	< RL	< RL	< RL	n.a.
M400	< RL	< RL	< RL	< RL	< RL
M401	< RL	< RL	< RL	< RL	n.a.
M402	< RL	< RL	d*2	< RL	n.a.

**Test Report No.: 244378056a 001** Page 94 of 148

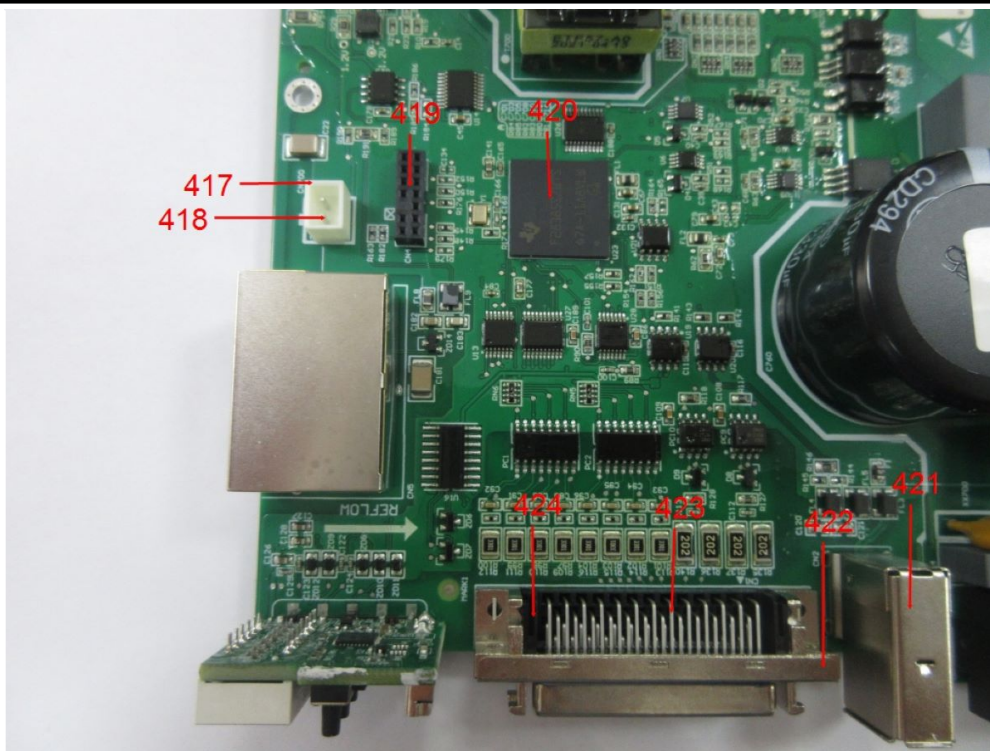


Material No.	Cd	Cr	Pb	Hg	Br
M403	< RL	< RL	< RL	< RL	n.a.
M404	< RL	< RL	< RL	< RL	< RL
M405	< RL	< RL	< RL	< RL	n.a.
M406	< RL	< RL	< RL	< RL	d*2
M407	< RL	< RL	< RL	< RL	d*2
M408	< RL	< RL	< RL	< RL	< RL
M409	< RL	< RL	< RL	< RL	< RL
M410	< RL	< RL	< RL	< RL	d*2

**Test Report No.: 244378056a 001** Page 95 of 148



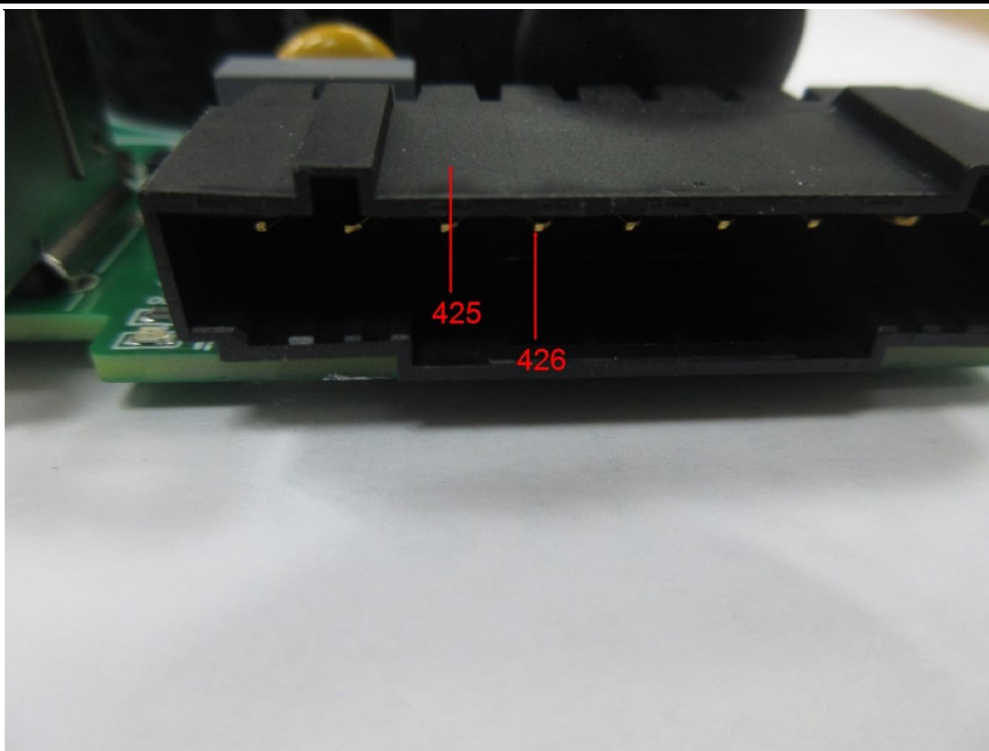
Material No.	Cd	Cr	Pb	Hg	Br
M411	< RL	< RL	< RL	< RL	< RL
M412	< RL	< RL	< RL	< RL	< RL
M413	< RL	< RL	< RL	< RL	d*2
M414	< RL	< RL	< RL	< RL	n.a.
M415	< RL	< RL	< RL	< RL	n.a.
M416	< RL	< RL	< RL	< RL	d*2



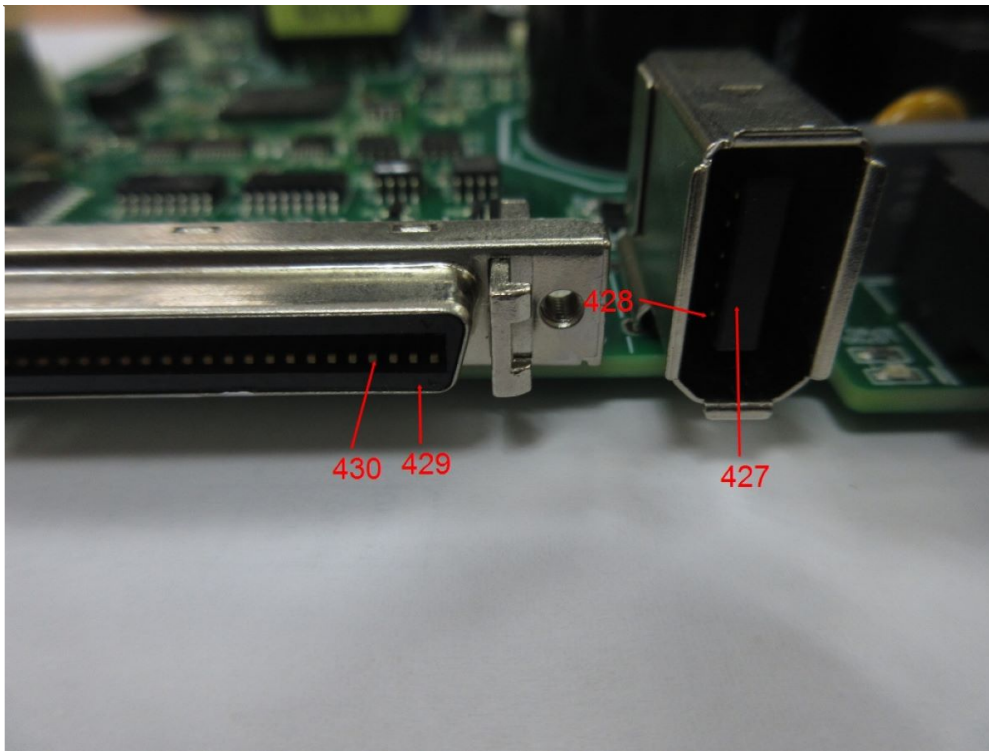
Material No.	Cd	Cr	Pb	Hg	Br
M417	< RL	< RL	< RL	< RL	< RL
M418	< RL	< RL	< RL	< RL	n.a.
M419	< RL	< RL	< RL	< RL	d*2
M420	< RL	< RL	< RL	< RL	< RL
M421	< RL	< RL	< RL	< RL	n.a.
M422	< RL	< RL	< RL	< RL	n.a.
M423	< RL	< RL	< RL	< RL	n.a.
M424	< RL	< RL	< RL	< RL	d*2

**Test Report No.: 244378056a 001**

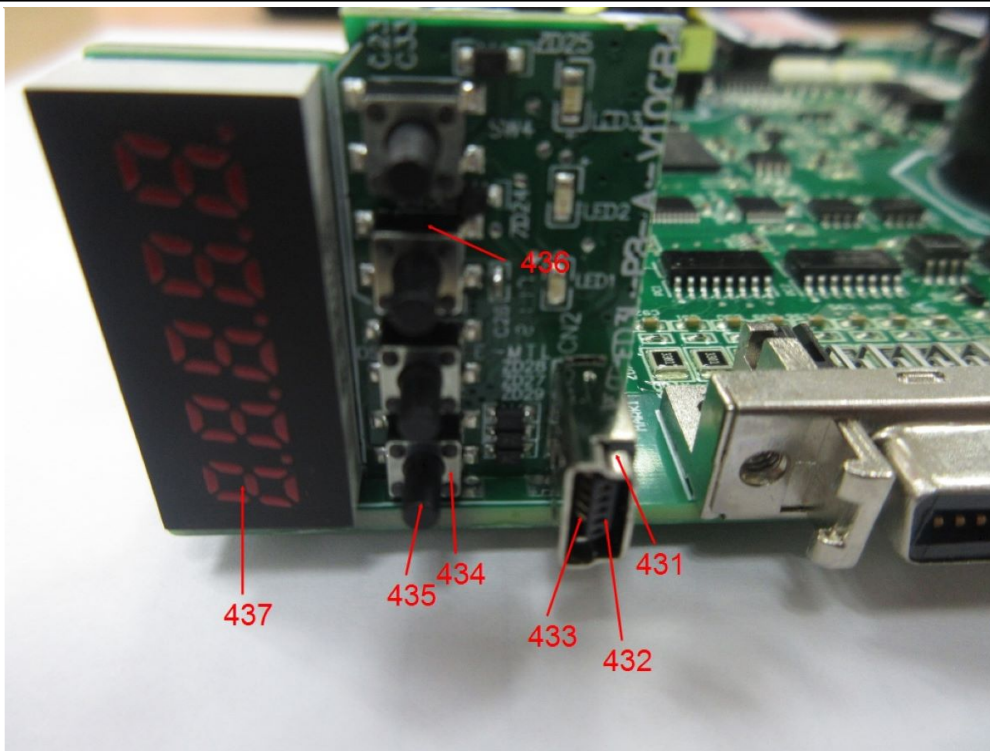
Page 97 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M425	< RL	< RL	< RL	< RL	d*2
M426	< RL	< RL	< RL	< RL	n.a.

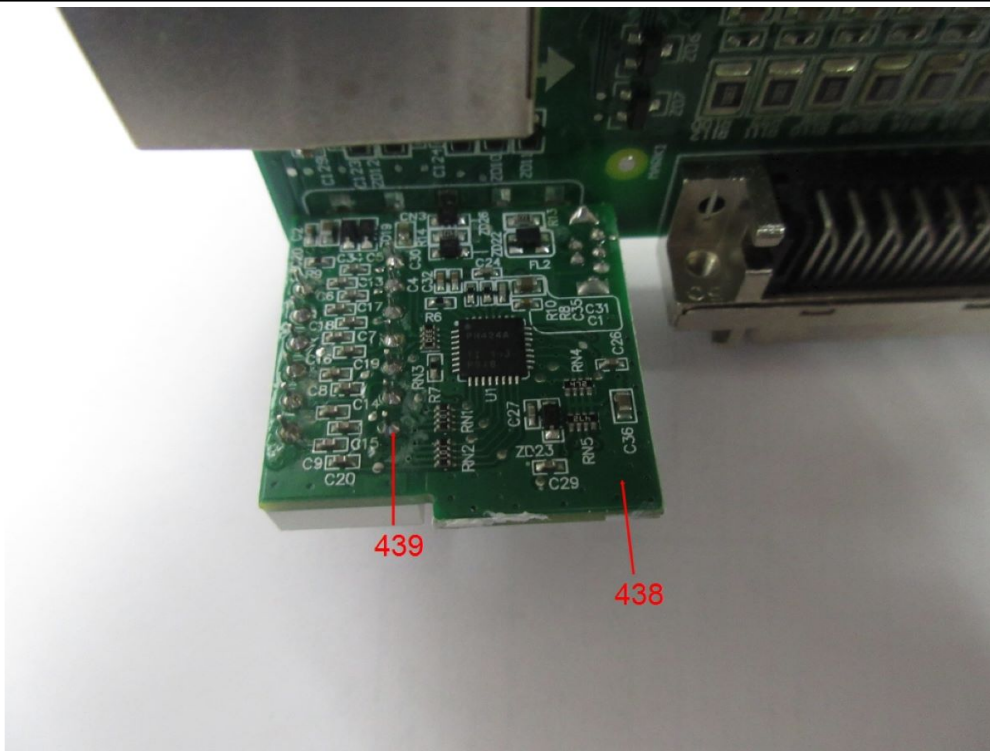


Material No.	Cd	Cr	Pb	Hg	Br
M427	< RL	< RL	< RL	< RL	d*2
M428	< RL	< RL	< RL	< RL	n.a.
M429	< RL	< RL	< RL	< RL	d*2
M430	< RL	< RL	< RL	< RL	n.a.

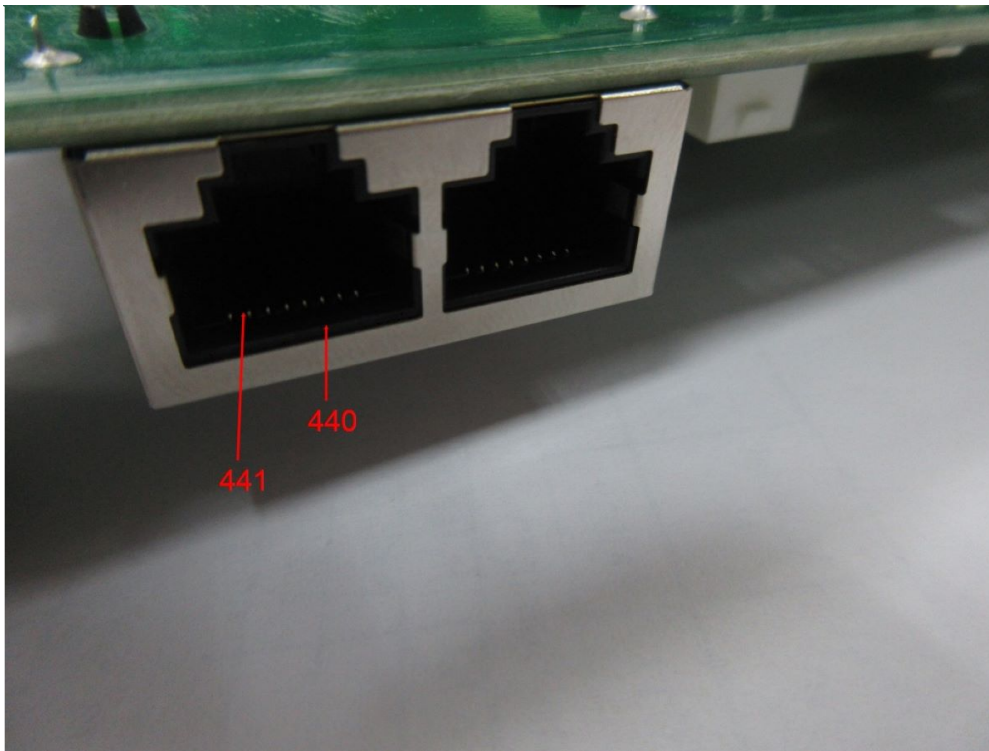


Material No.	Cd	Cr	Pb	Hg	Br
M431	< RL	< RL	< RL	< RL	n.a.
M432	< RL	< RL	< RL	< RL	< RL
M433	< RL	< RL	< RL	< RL	n.a.
M434	< RL	< RL	< RL	< RL	n.a.
M435	< RL	< RL	< RL	< RL	< RL
M436	< RL	< RL	< RL	< RL	< RL
M437	< RL	< RL	< RL	< RL	< RL

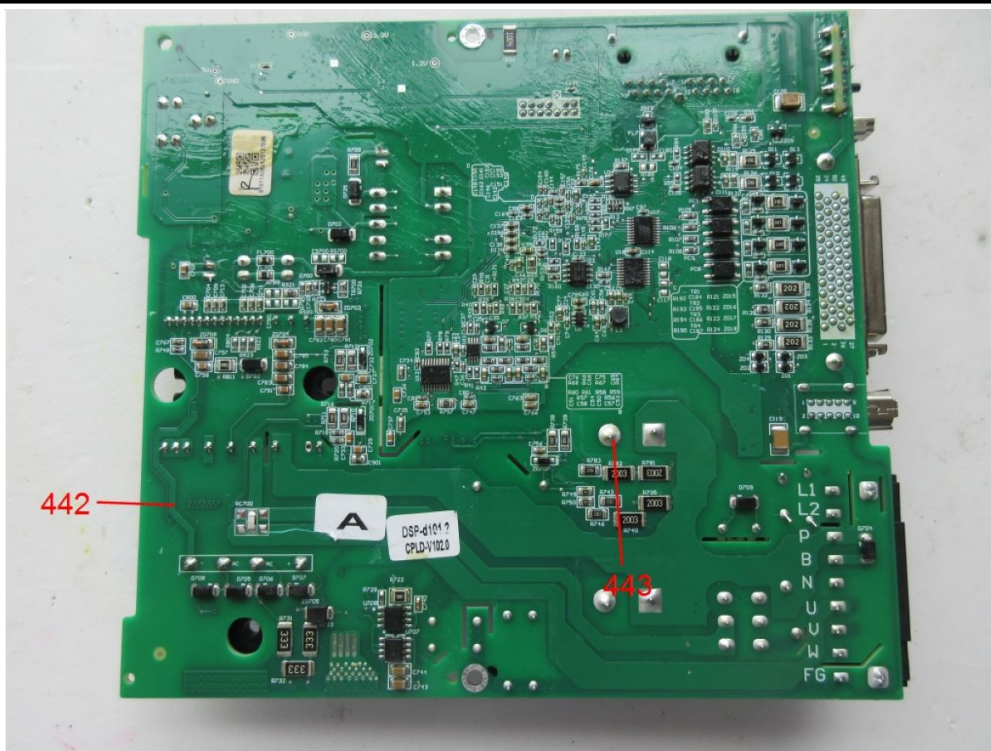
**Test Report No.: 244378056a 001** Page 100 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M438	< RL	< RL	< RL	< RL	d*2
M439	< RL	< RL	< RL	< RL	n.a.



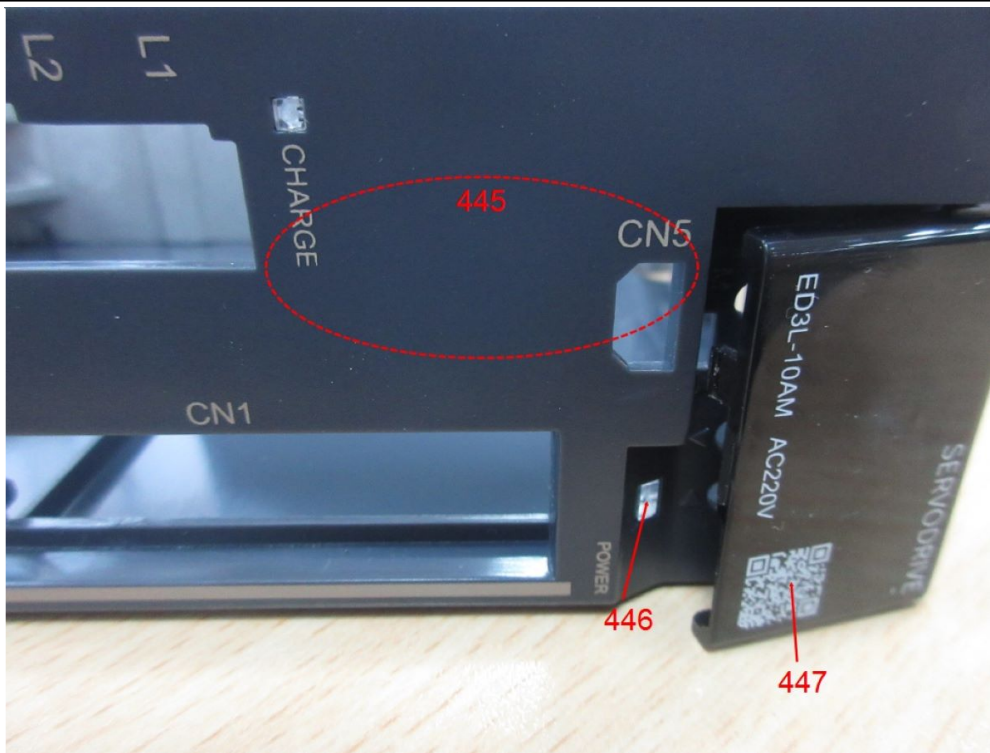
Material No.	Cd	Cr	Pb	Hg	Br
M440	< RL	< RL	< RL	< RL	d*2
M441	< RL	< RL	< RL	< RL	n.a.



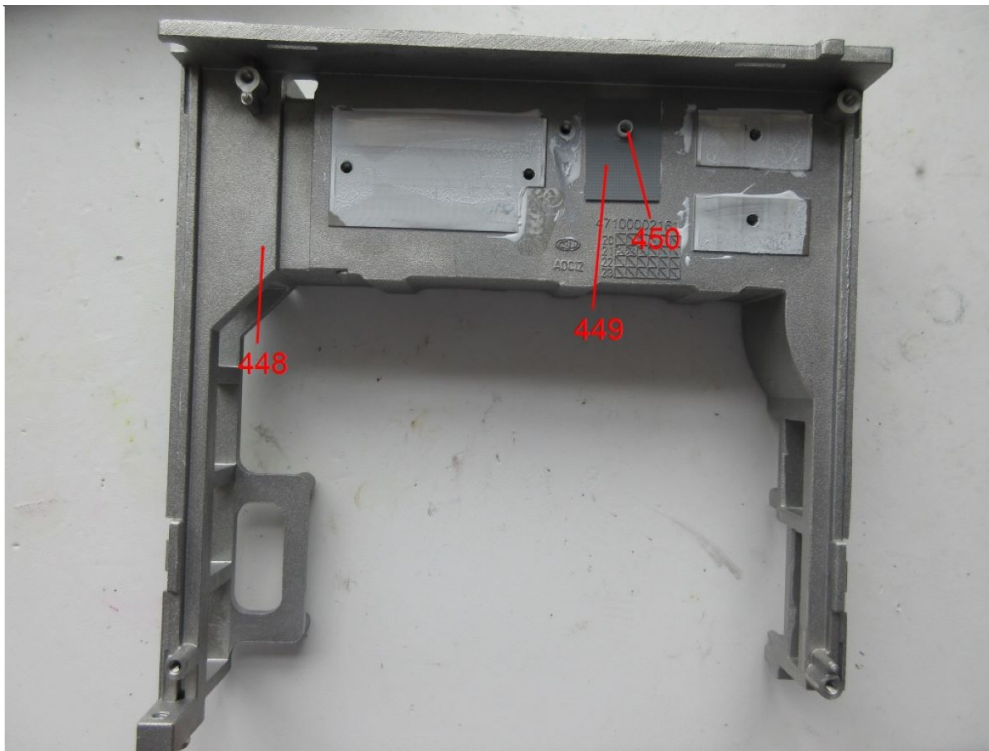
Material No.	Cd	Cr	Pb	Hg	Br
M442	< RL	< RL	< RL	< RL	d*2
M443	< RL	< RL	< RL	< RL	n.a.



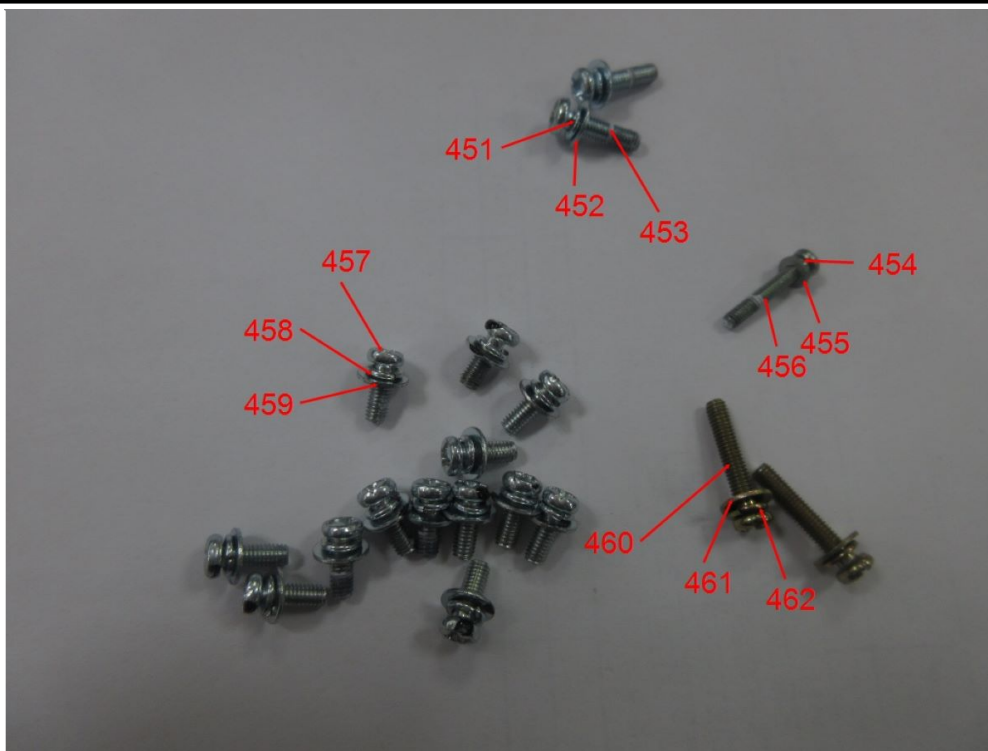
Material No.	Cd	Cr	Pb	Hg	Br
M444	< RL	< RL	< RL	< RL	< RL



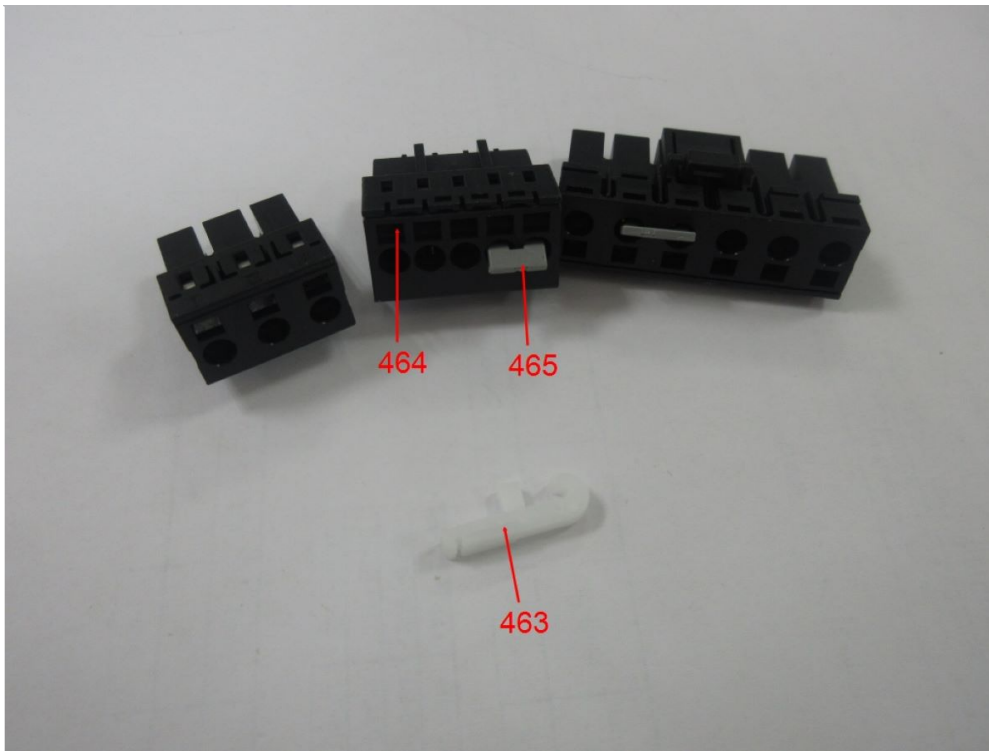
Material No.	Cd	Cr	Pb	Hg	Br
M445	< RL	< RL	< RL	< RL	< RL
M446	< RL	< RL	< RL	< RL	< RL
M447	< RL	< RL	< RL	< RL	< RL



Material No.	Cd	Cr	Pb	Hg	Br
M448	< RL	d*2	< RL	< RL	n.a.
M449	< RL	< RL	< RL	< RL	< RL
M450	< RL	< RL	< RL	< RL	< RL



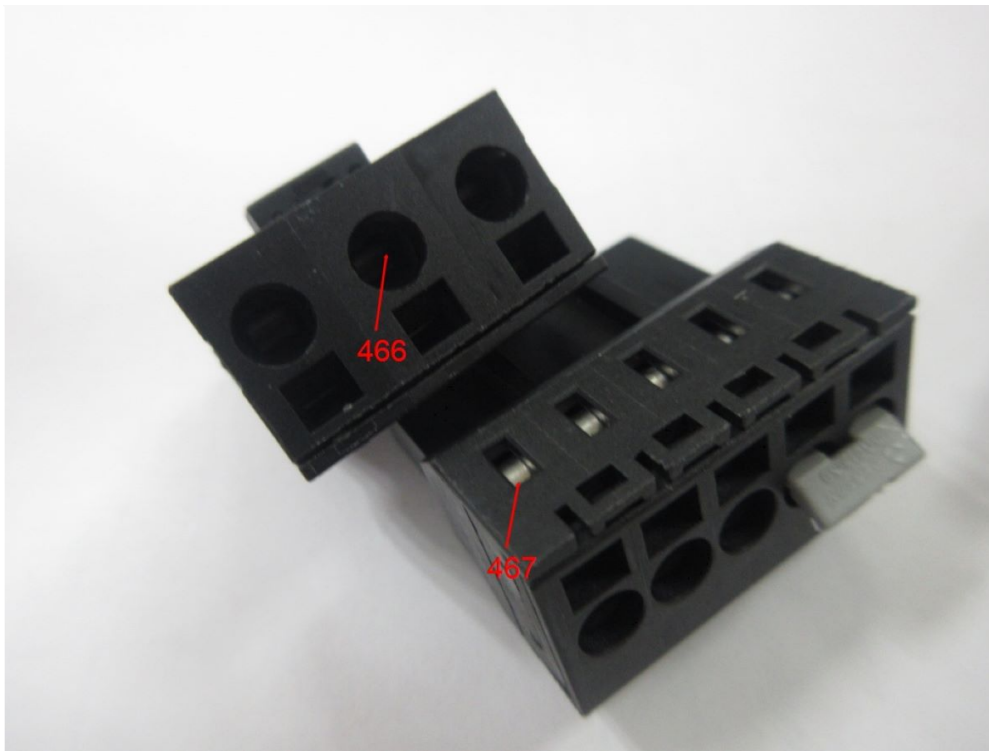
Material No.	Cd	Cr	Pb	Hg	Br
M451	< RL	d*2	< RL	< RL	n.a.
M452	< RL	d*2	< RL	< RL	n.a.
M453	< RL	d*2	< RL	< RL	n.a.
M454	< RL	d*2	< RL	< RL	n.a.
M455	< RL	d*2	< RL	< RL	n.a.
M456	< RL	d*2	< RL	< RL	n.a.
M457	< RL	d*2	< RL	< RL	n.a.
M458	< RL	d*2	< RL	< RL	n.a.
M459	< RL	d*2	< RL	< RL	n.a.
M460	< RL	d*2	< RL	< RL	n.a.
M461	< RL	d*2	< RL	< RL	n.a.
M462	< RL	d*2	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M463	< RL	< RL	< RL	< RL	< RL
M464	< RL	< RL	< RL	< RL	d*2
M465	< RL	< RL	< RL	< RL	< RL

Test Report No.: 244378056a 001

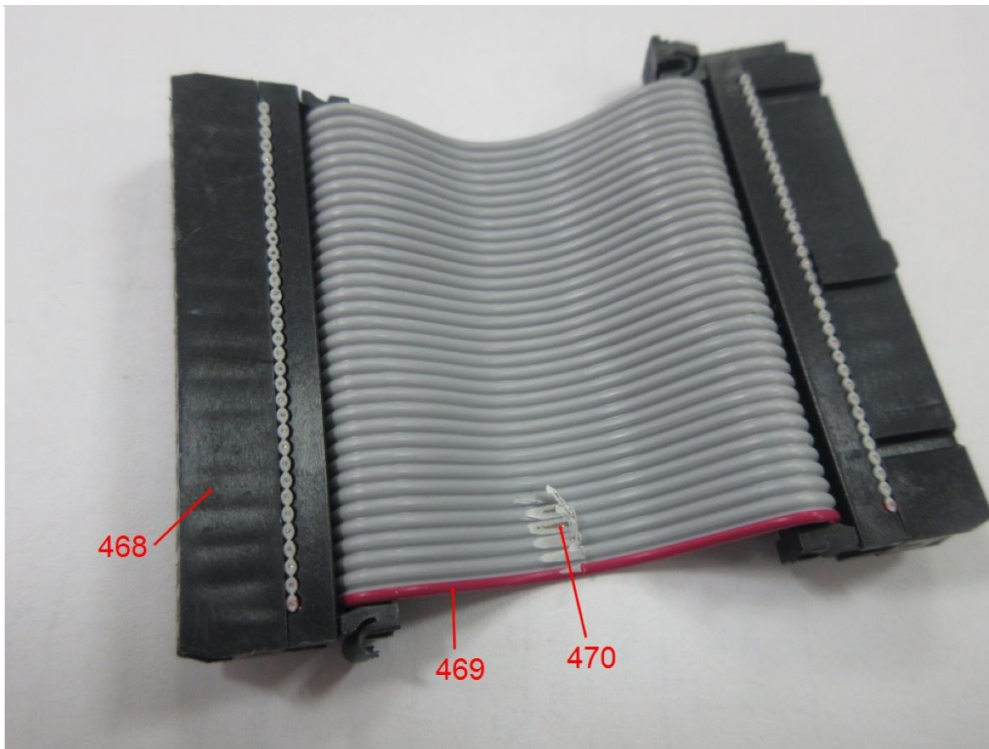
Page 108 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M466	< RL	d*2	< RL	< RL	n.a.
M467	< RL	d*2	< RL	< RL	n.a.

Test Report No.: 244378056a 001

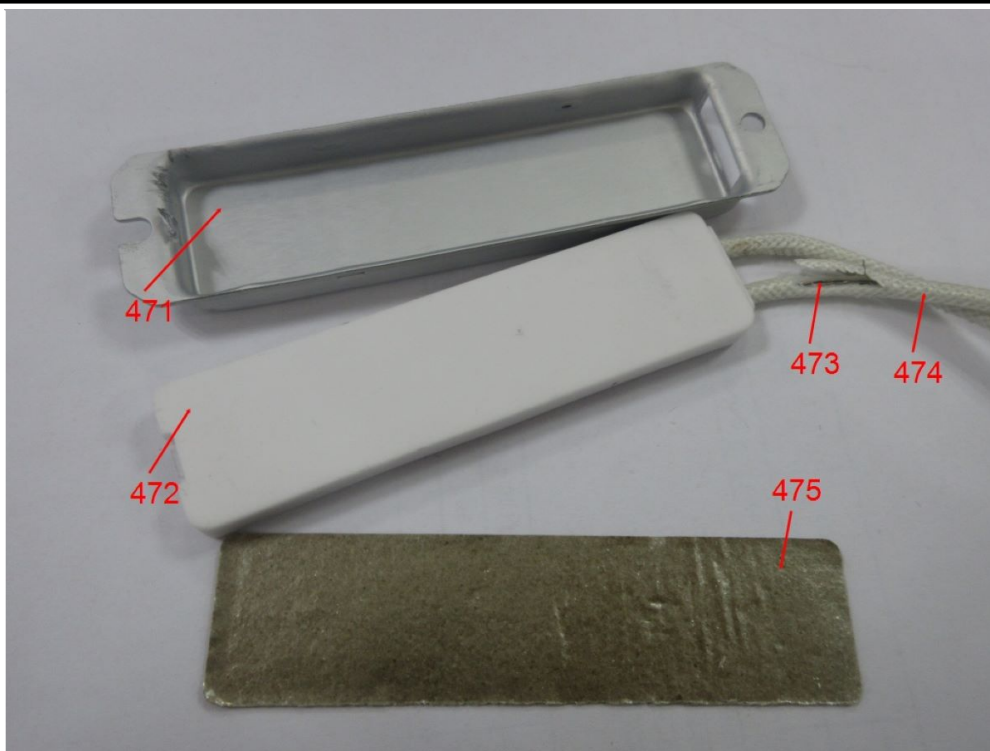
Page 109 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M468	< RL	< RL	< RL	< RL	d*2
M469	< RL	< RL	< RL	< RL	< RL
M470	< RL	< RL	< RL	< RL	n.a.

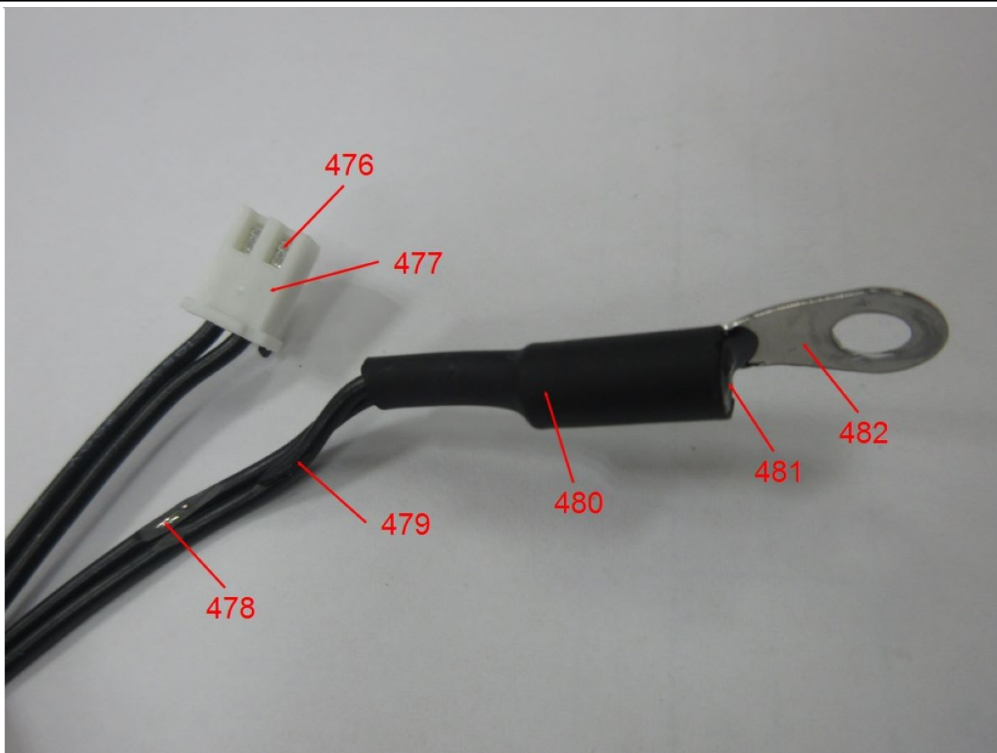
Test Report No.: 244378056a 001

Page 110 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M471	< RL	< RL	< RL	< RL	n.a.
M472	< RL	< RL	< RL	< RL	n.a.
M473	< RL	< RL	< RL	< RL	n.a.
M474	< RL	< RL	< RL	< RL	< RL
M475	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001** Page 111 of 148



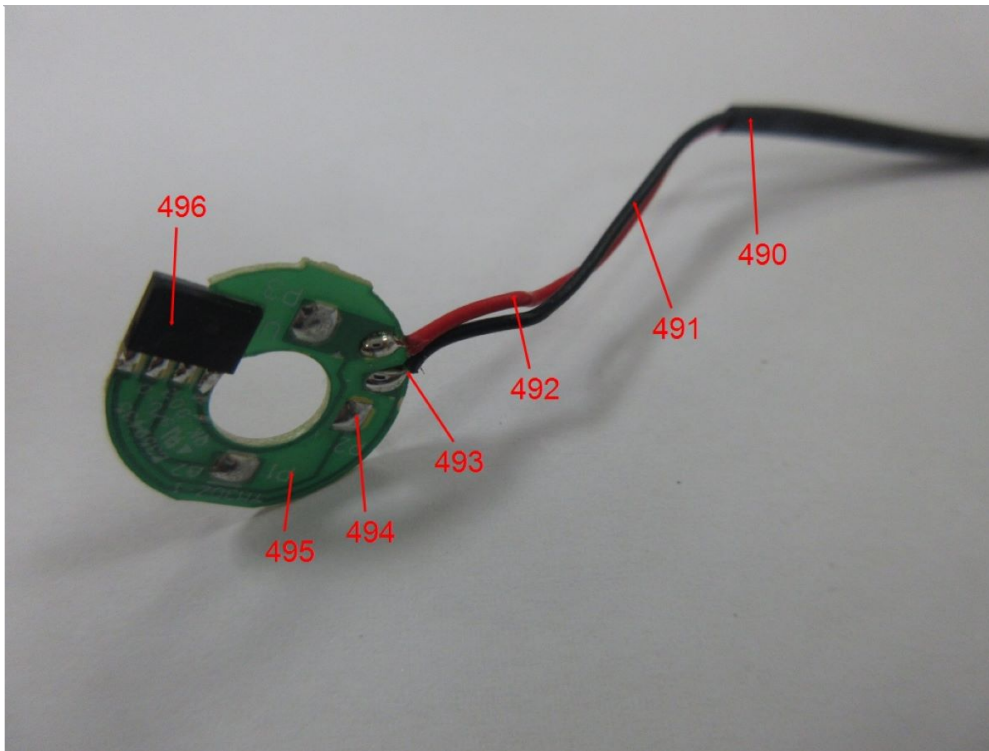
Material No.	Cd	Cr	Pb	Hg	Br
M476	< RL	< RL	< RL	< RL	n.a.
M477	< RL	< RL	< RL	< RL	< RL
M478	< RL	< RL	< RL	< RL	n.a.
M479	< RL	< RL	< RL	< RL	< RL
M480	< RL	< RL	< RL	< RL	< RL
M481	< RL	< RL	< RL	< RL	< RL
M482	< RL	d*2	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M483	< RL	< RL	< RL	< RL	< RL
M484	< RL	< RL	< RL	< RL	d*2



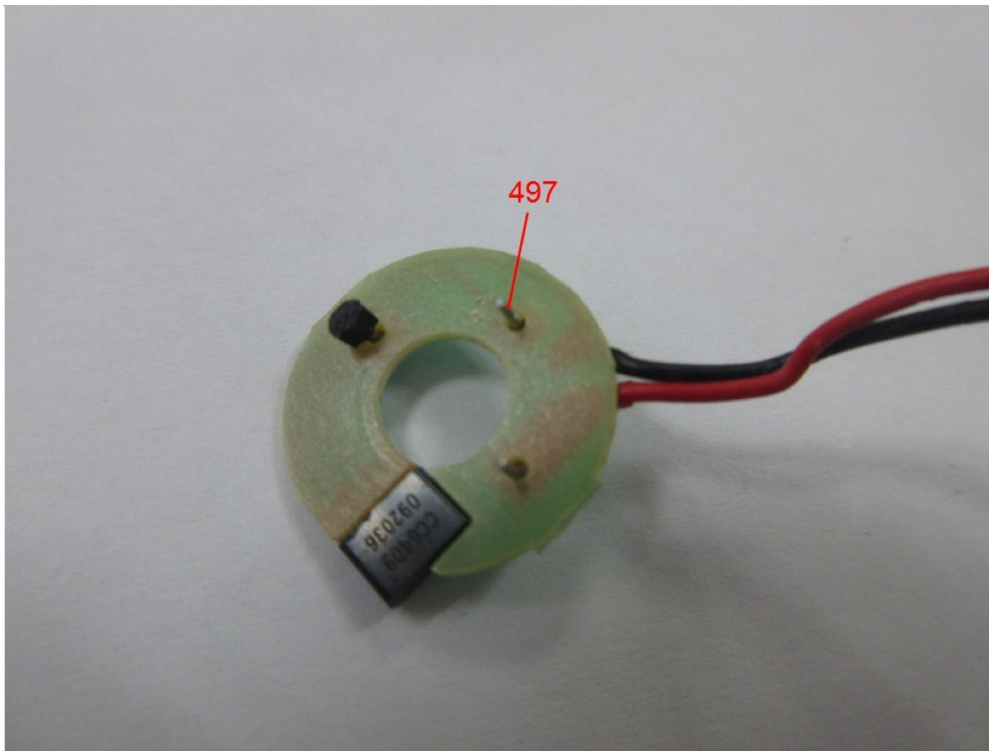
Material No.	Cd	Cr	Pb	Hg	Br
M485	< RL	< RL	< RL	< RL	n.a.
M486	< RL	d*2	< RL	< RL	n.a.
M487	< RL	d*2	< RL	< RL	n.a.
M488	< RL	< RL	< RL	< RL	n.a.
M489	< RL	< RL	< RL	< RL	d*2



Material No.	Cd	Cr	Pb	Hg	Br
M490	< RL	< RL	< RL	< RL	< RL
M491	< RL	< RL	< RL	< RL	< RL
M492	< RL	< RL	< RL	< RL	< RL
M493	< RL	< RL	< RL	< RL	n.a.
M494	< RL	< RL	< RL	< RL	n.a.
M495	< RL	< RL	< RL	< RL	d*2
M496	< RL	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 115 of 148



Material No.	Cd	Cr	Pb	Hg	Br
M497	< RL	< RL	< RL	< RL	n.a.

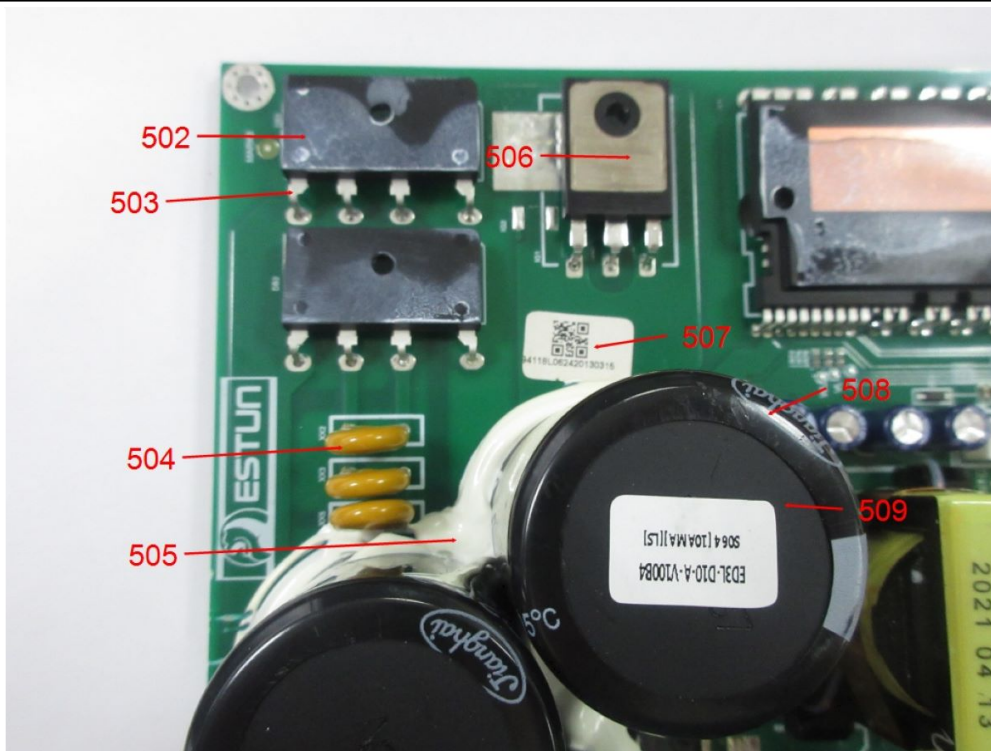
Test Report No.: 244378056a 001

Page 116 of 148

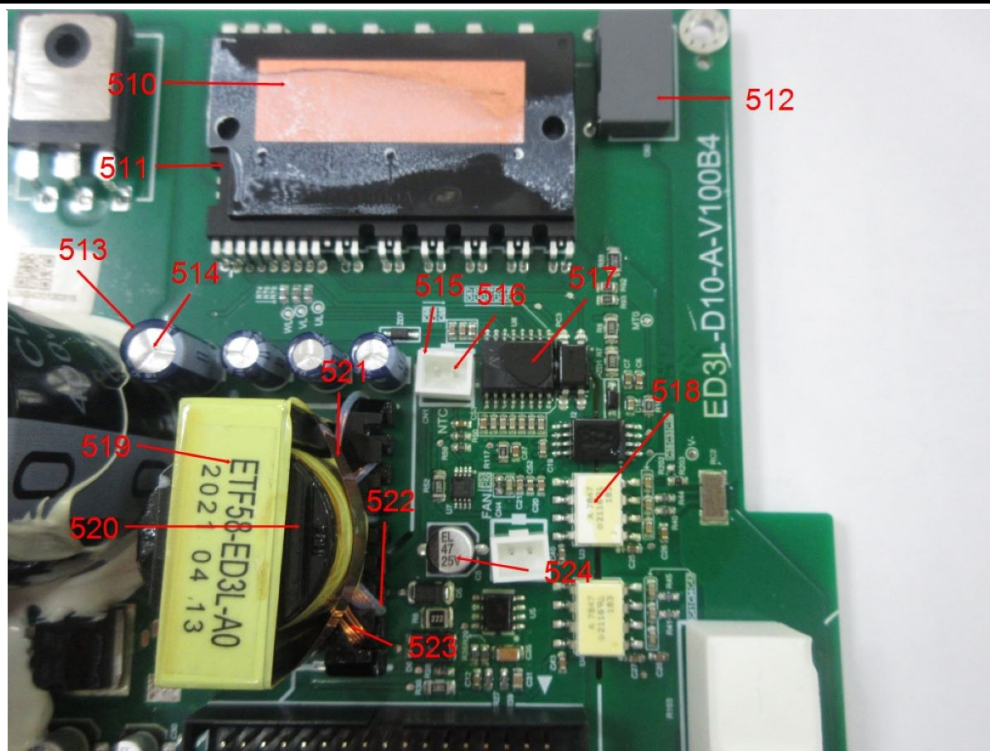


Material No.	Cd	Cr	Pb	Hg	Br
M498	< RL	< RL	< RL	< RL	d*2
M499	< RL	d*2	< RL	< RL	n.a.
M500	< RL	d*2	< RL	< RL	n.a.
M501	< RL	d*2	< RL	< RL	n.a.

**Test Report No.: 244378056a 001** Page 117 of 148

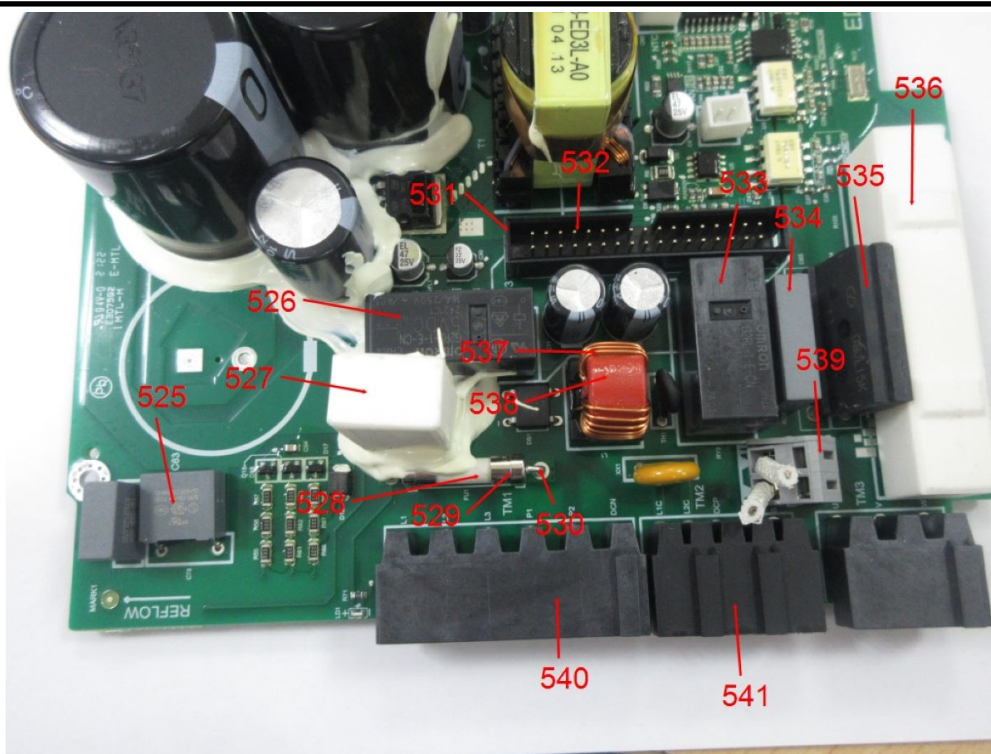


Material No.	Cd	Cr	Pb	Hg	Br
M502	< RL	< RL	< RL	< RL	d*2
M503	< RL	< RL	< RL	< RL	n.a.
M504	< RL	< RL	< RL	< RL	n.a.
M505	< RL	< RL	< RL	< RL	< RL
M506	< RL	< RL	< RL	< RL	n.a.
M507	< RL	< RL	< RL	< RL	< RL
M508	< RL	< RL	< RL	< RL	< RL
M509	< RL	< RL	< RL	< RL	< RL



Material No.	Cd	Cr	Pb	Hg	Br
M510	< RL	< RL	< RL	< RL	n.a.
M511	< RL	< RL	< RL	< RL	< RL
M512	< RL	< RL	< RL	< RL	d*2
M513	< RL	< RL	< RL	< RL	< RL
M514	< RL	< RL	< RL	< RL	n.a.
M515	< RL	< RL	< RL	< RL	< RL
M516	< RL	< RL	< RL	< RL	n.a.
M517	< RL	< RL	< RL	< RL	< RL
M518	< RL	< RL	< RL	< RL	d*2
M519	< RL	< RL	< RL	< RL	< RL
M520	< RL	< RL	< RL	< RL	< RL
M521	< RL	< RL	< RL	< RL	n.a.
M522	< RL	< RL	< RL	< RL	< RL
M523	< RL	< RL	< RL	< RL	n.a.
M524	< RL	< RL	< RL	< RL	n.a.

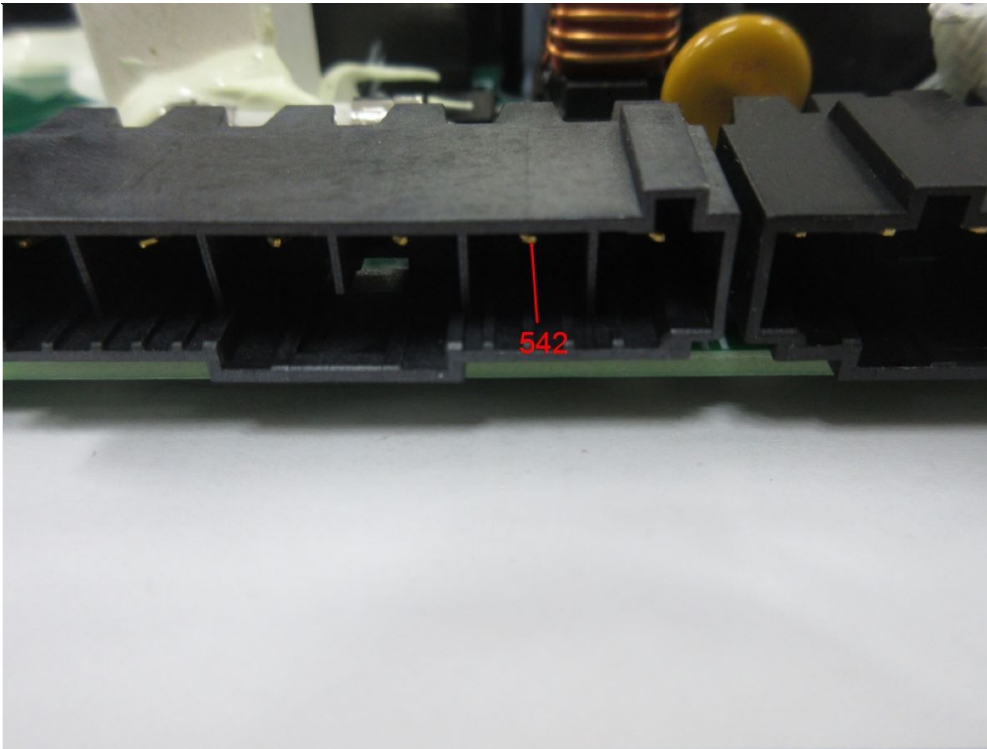
**Test Report No.: 244378056a 001** Page 119 of 148



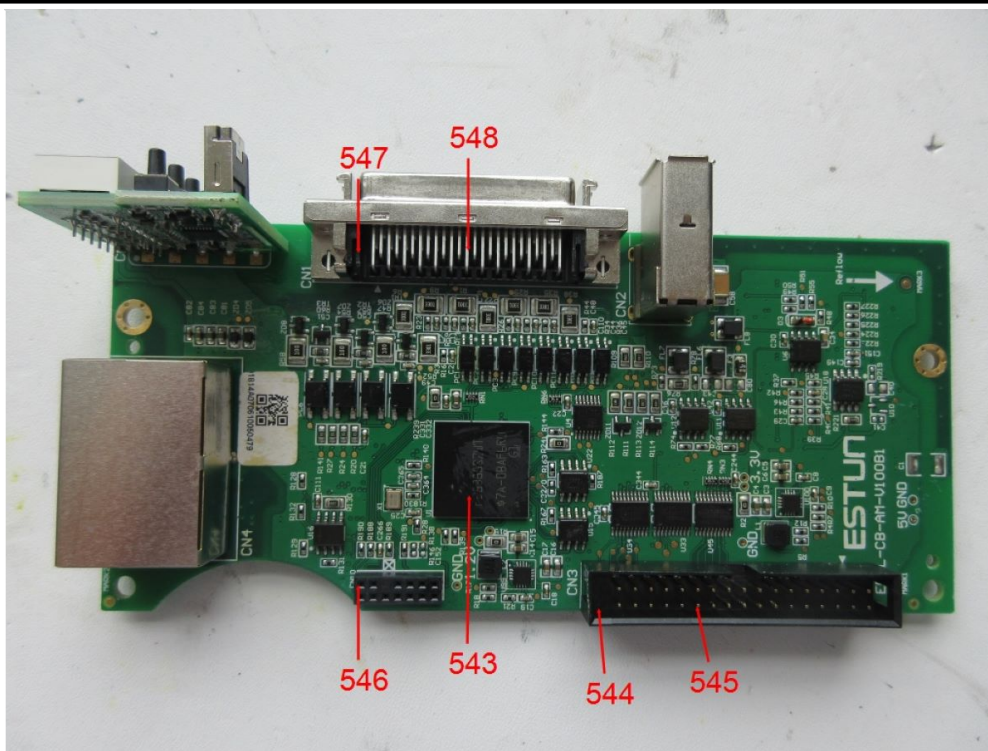
Material No.	Cd	Cr	Pb	Hg	Br
M525	< RL	< RL	< RL	< RL	d*2
M526	< RL	< RL	< RL	< RL	d*2
M527	< RL	< RL	< RL	< RL	n.a.
M528	< RL	< RL	< RL	< RL	n.a.
M529	< RL	< RL	< RL	< RL	n.a.
M530	< RL	< RL	< RL	< RL	n.a.
M531	< RL	< RL	< RL	< RL	d*2
M532	< RL	< RL	< RL	< RL	n.a.
M533	< RL	< RL	< RL	< RL	d*2
M534	< RL	< RL	< RL	< RL	d*2
M535	< RL	< RL	< RL	< RL	d*2
M536	< RL	< RL	< RL	< RL	n.a.
M537	< RL	< RL	< RL	< RL	n.a.
M538	< RL	< RL	< RL	< RL	n.a.
M539	< RL	< RL	< RL	< RL	< RL
M540	< RL	< RL	< RL	< RL	< RL
M541	< RL	< RL	< RL	< RL	d*2

**Test Report No.: 244378056a 001**

Page 120 of 148



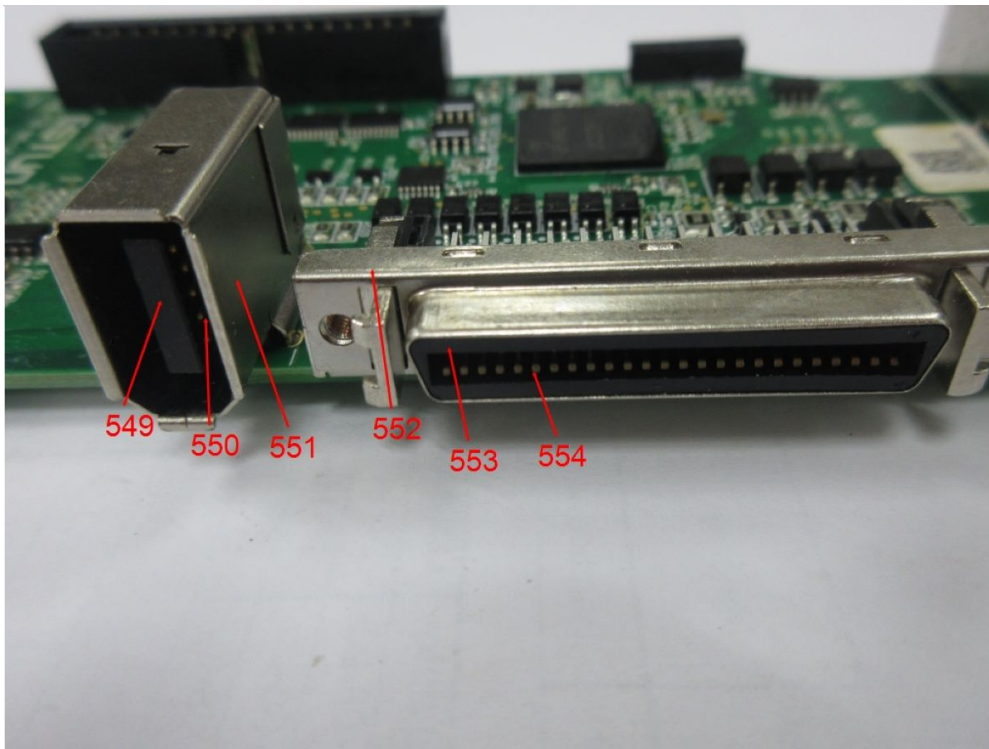
Material No.	Cd	Cr	Pb	Hg	Br
M542	< RL	< RL	< RL	< RL	n.a.



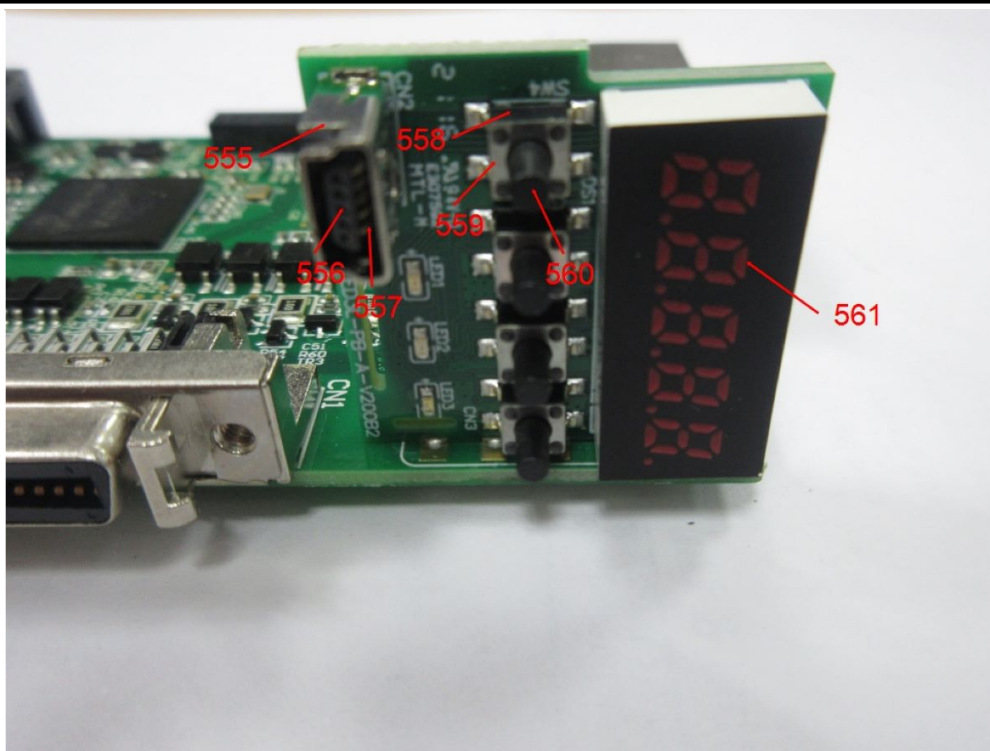
Material No.	Cd	Cr	Pb	Hg	Br
M543	< RL	< RL	< RL	< RL	< RL
M544	< RL	< RL	< RL	< RL	d*2
M545	< RL	< RL	< RL	< RL	n.a.
M546	< RL	< RL	< RL	< RL	d*2
M547	< RL	< RL	< RL	< RL	d*2
M548	< RL	< RL	< RL	< RL	n.a.

Test Report No.: 244378056a 001

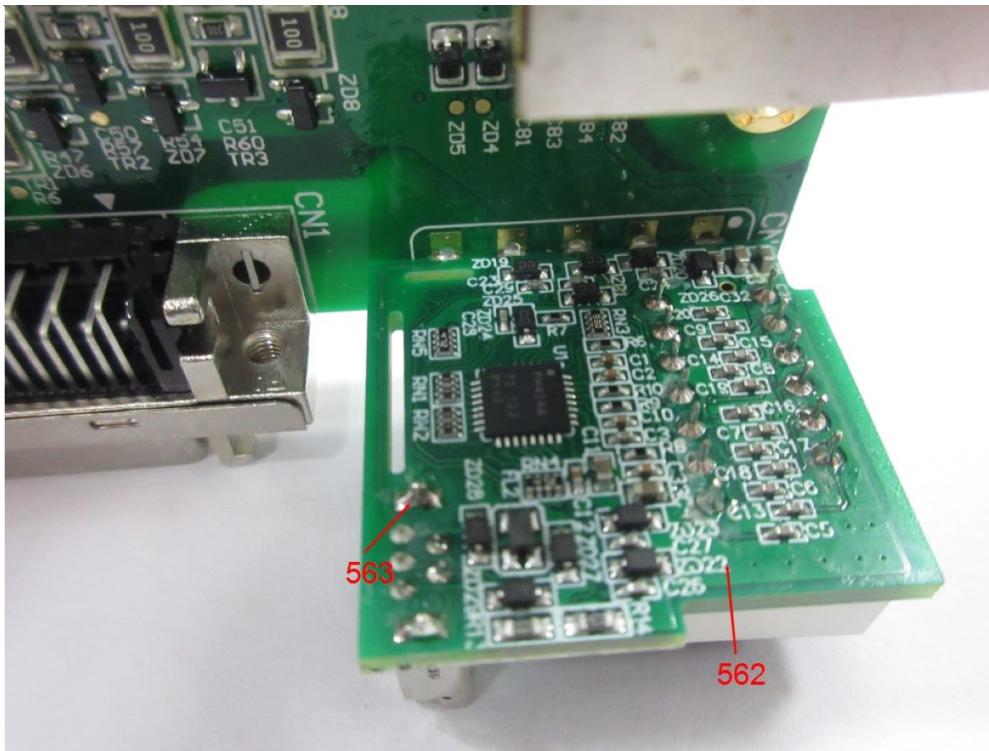
Page 122 of 148



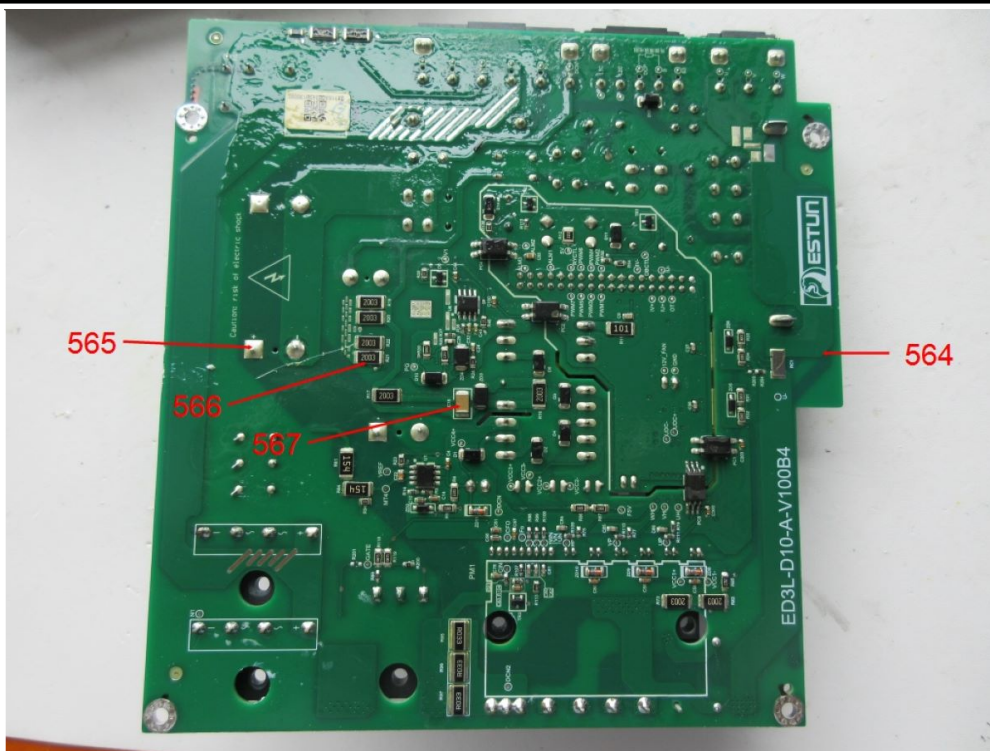
Material No.	Cd	Cr	Pb	Hg	Br
M549	< RL	< RL	< RL	< RL	d*2
M550	< RL	< RL	< RL	< RL	n.a.
M551	< RL	< RL	< RL	< RL	n.a.
M552	< RL	< RL	< RL	< RL	n.a.
M553	< RL	< RL	< RL	< RL	d*2
M554	< RL	< RL	< RL	< RL	n.a.



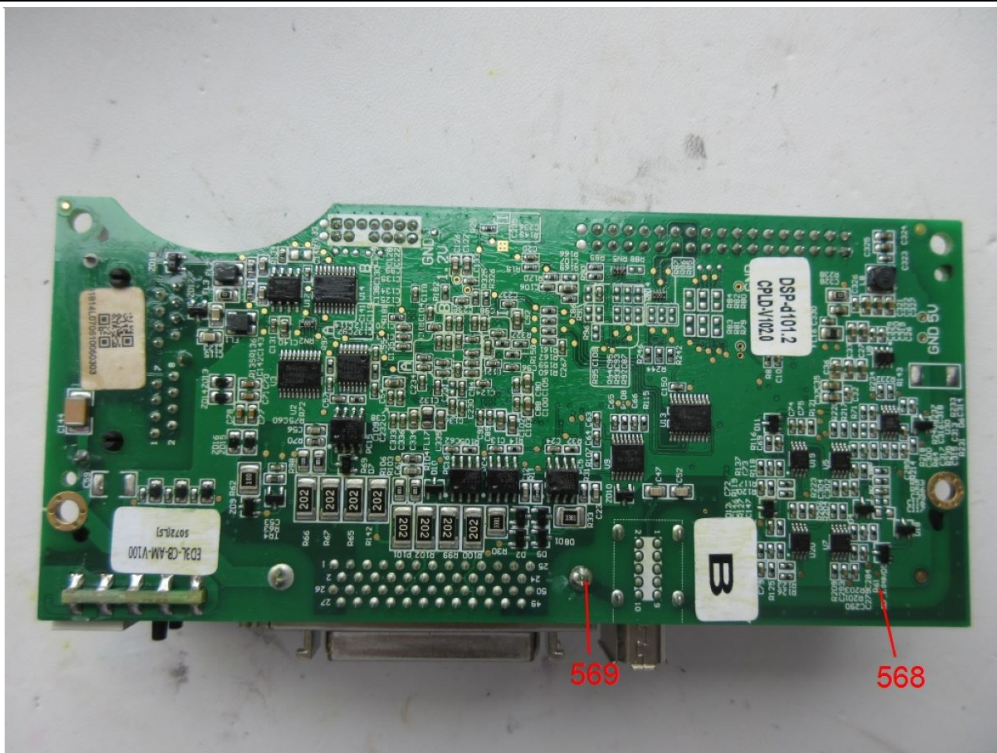
Material No.	Cd	Cr	Pb	Hg	Br
M555	< RL	< RL	< RL	< RL	n.a.
M556	< RL	< RL	< RL	< RL	< RL
M557	< RL	< RL	< RL	< RL	n.a.
M558	< RL	< RL	< RL	< RL	< RL
M559	< RL	< RL	< RL	< RL	n.a.
M560	< RL	< RL	< RL	< RL	< RL
M561	< RL	< RL	< RL	< RL	d*2



Material No.	Cd	Cr	Pb	Hg	Br
M562	< RL	< RL	< RL	< RL	d*2
M563	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M564	< RL	< RL	< RL	< RL	d*2
M565	< RL	< RL	< RL	< RL	n.a.
M566	< RL	< RL	d*2	< RL	n.a.
M567	< RL	< RL	< RL	< RL	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M568	< RL	< RL	< RL	< RL	d*2
M569	< RL	< RL	< RL	< RL	n.a.

**Abbreviation:**  
 Pb = Lead  
 Cd = Cadmium  
 Hg = Mercury  
 Cr = Chromium  
 Br = Bromine  
 n.a. = not applicable  
 < = less than  
 RL = Reporting Limit  
 d.= detected

**Test Report No.: 244378056a 001**

Page 127 of 148

**Remark:**

- (\*1) The screening result was found in the inconclusive region, thus the further wet chemistry tests are suggested.
- (\*2) The screening result was detected above the screening limits, thus the further wet chemistry tests are suggested.
- (\*3) For metal sample, the Chromium (VI) content has been confirmed with reference to IEC 62321-7-1:2015.
- (\*4) For plastic sample or electronic sample, the Chromium (VI) content has been confirmed with reference to IEC 62321-7-2:2017.
- (\*5) For leather sample, the Chromium (VI) content has been confirmed with reference to EN ISO 17075-1:2017.
- (\*6) The screening result of Cr was found in the inconclusive region, thus the chromium (VI) content have been confirmed with EN ISO 17075-1:2017.
- (\*7) Component(s)/ materials(s) with an area of less than 2mm x2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.  
For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.  
Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.  
All other materials will be sampled and tested at one test point representatively.
- (\*8) The Chromium (Cr) and Bromine (Br) in the above result table indicate the total chromium and total bromine by means of XRF screening.  
PBBs, or PBDEs content shall be further confirmed with reference to IEC 62321-6:2015.  
Chromium (VI) shall be further confirmed with reference to IEC 62321-7-1:2015, IEC 62321-7-2:2017 or EN ISO 17075-1:2017.

XRF Screening limits for different matrices :

Material	Concentration (%)				
	Cd	Cr	Pb	Hg	Br
<b>Polymeric</b>	P≤0.006<X≤0.014<F	P≤0.064<X	P≤0.067<X≤0.133<F	P≤0.066<X≤0.134<F	P≤0.029<X
<b>Metallic</b>	P≤0.006<X≤0.014<F	P≤0.064<X	P≤0.067<X≤0.133<F	P≤0.066<X≤0.134<F	NA
<b>Electronic Components</b>	P≤0.004<X≤0.016<F	P≤0.044<X	P≤0.047<X≤0.153<F	P≤0.046<X≤0.154<F	P≤0.024<X

**Test Report No.: 244378056a 001**

Page 128 of 148

**Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)**

Test Method: Total Cadmium, Lead, Mercury, Chromium  
- Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

Chromium (VI)  
- For Metal material - Ref. to IEC 62321-7-1:2015  
- For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017  
- For Leather material - Ref. to BS EN ISO 17075-1:2017

PBBs, PBDEs - Ref. to IEC 62321-6:2015

**Material List:**

Material No.	Material	Color	Location	Test plan
				A = Test HM only B = Test FR only C = Test HM + FR
M008	Plastic	black	refer to photo	B
M011	Plastic	black	refer to photo	B
M019	Metal	silver	refer to photo	A
M020	PCB board	green	refer to photo	B
M021	Plastic	black	refer to photo	B
M022	Metal	silver	refer to photo	A
M024	Metal	silver	refer to photo	A
M031	Metal	silver	refer to photo	A
M035	Plastic	black	refer to photo	B
M037	Metal	silver	refer to photo	A
M040	Plastic	black	refer to photo	B
M046	Metal	silver	refer to photo	A
M048	Metal	silver	refer to photo	A
M049	Metal	silver	refer to photo	A
M050	Metal	silver	refer to photo	A
M051	Metal	silver	refer to photo	A
M052	Metal	silver	refer to photo	A
M053	Metal	silver	refer to photo	A
M054	PCB board	green	refer to photo	B
M056	Plastic	black	refer to photo	B
M060	Plastic	black	refer to photo	B
M063	Glass	red/black	refer to photo	A
M066	Ceramic	black/white	refer to photo	A
M069	Plastic	black	refer to photo	B

**Test Report No.: 244378056a 001**

Page 129 of 148

M077	Plastic	white/black/red	refer to photo	B
M080	Plastic	black	refer to photo	B
M083	Plastic	black	refer to photo	B
M086	Plastic	black	refer to photo	B
M097	PCB board	green	refer to photo	B
M098	Plastic	grey	refer to photo	B
M101	Plastic	grey	refer to photo	B
M102	Plastic	black	refer to photo	B
M104	Plastic	black	refer to photo	B
M105	Plastic	beige/black	refer to photo	B
M109	Plastic	black	refer to photo	B
M114	Plastic	black	refer to photo	B
M137	Plastic	grey	refer to photo	B
M143	Metal	silver	refer to photo	A
M146	Plastic	black	refer to photo	B
M147	Metal	silver	refer to photo	A
M148	Metal	silver	refer to photo	A
M149	Metal	silver	refer to photo	A
M150	Metal	silver	refer to photo	A
M151	Metal	silver	refer to photo	A
M153	Metal	silver	refer to photo	A
M157	Metal	silver	refer to photo	A
M160	PCB board	green	refer to photo	B
M161	Plastic	black	refer to photo	B
M164	Metal	silver	refer to photo	A
M172	Plastic	white/black	refer to photo	B
M175	Plastic	grey	refer to photo	B
M178	Plastic	black	refer to photo	B
M181	Plastic	grey	refer to photo	B
M182	Plastic	black	refer to photo	B
M185	Plastic	black	refer to photo	B
M188	Plastic	black	refer to photo	B
M190	Plastic	black	refer to photo	B
M195	Plastic	black	refer to photo	B
M199	Metal	silver	refer to photo	A
M205	PCB board	green	refer to photo	B
M207	Glass	multicolor	refer to photo	A

**Test Report No.: 244378056a 001**

Page 130 of 148

M226	Metal	silver	refer to photo	A
M227	Metal	silver	refer to photo	A
M228	Metal	silver	refer to photo	A
M229	Metal	silver	refer to photo	A
M230	Metal	silver	refer to photo	A
M231	Metal	silver	refer to photo	A
M232	Metal	silver	refer to photo	A
M233	Metal	silver	refer to photo	A
M234	Metal	silver	refer to photo	A
M235	Metal	silver	refer to photo	A
M236	Metal	silver	refer to photo	A
M237	Metal	silver	refer to photo	A
M238	Metal	silver	refer to photo	A
M239	Metal	silver	refer to photo	A
M240	Metal	silver	refer to photo	A
M241	Metal	silver	refer to photo	A
M242	Metal	silver	refer to photo	A
M243	Metal	silver	refer to photo	A
M250	Metal	silver	refer to photo	A
M253	Plastic	black	refer to photo	B
M256	Metal	silver	refer to photo	A
M257	Plastic	black	refer to photo	B
M259	Metal	silver	refer to photo	A
M261	Metal	silver	refer to photo	A
M262	Plastic	black	refer to photo	B
M263	Metal	silver	refer to photo	A
M264	Metal	silver	refer to photo	A
M266	Plastic	black	refer to photo	B
M267	Metal	silver	refer to photo	A
M271	PCB board	blue	refer to photo	B
M275	Ceramic	black/white	refer to photo	A
M289	Plastic	black	refer to photo	B
M292	Plastic	black	refer to photo	B
M294	Plastic	black	refer to photo	B
M295	Plastic	grey	refer to photo	B
M296	Plastic	black	refer to photo	B
M300	Plastic	red	refer to photo	B

**Test Report No.: 244378056a 001**

Page 131 of 148

M305	Plastic	black	refer to photo	B
M317	Plastic	white/black	refer to photo	B
M319	Metal	copper	refer to photo	A
M320	Metal	silver	refer to photo	A
M321	Plastic	black	refer to photo	B
M324	Plastic	grey	refer to photo	B
M326	Plastic	grey	refer to photo	B
M329	Ceramic	black/white	refer to photo	A
M331	Plastic	black	refer to photo	B
M334	Plastic	black	refer to photo	B
M337	Glass	multicolor	refer to photo	A
M340	Plastic	black	refer to photo	B
M342	Plastic	black	refer to photo	B
M344	Plastic	black	refer to photo	B
M349	Plastic	black	refer to photo	B
M358	PCB board	green	refer to photo	B
M360	PCB board	green	refer to photo	B
M371	Plastic	black	refer to photo	B
M372	Metal	silver	refer to photo	A
M374	Metal	silver	refer to photo	A
M375	Metal	silver	refer to photo	A
M376	Metal	silver	refer to photo	A
M377	Metal	silver	refer to photo	A
M378	Metal	silver	refer to photo	A
M379	Metal	silver	refer to photo	A
M380	Metal	silver	refer to photo	A
M381	Metal	silver	refer to photo	A
M382	Metal	silver	refer to photo	A
M383	Metal	silver	refer to photo	A
M384	Metal	silver	refer to photo	A
M385	Metal	silver	refer to photo	A
M392	Metal	silver	refer to photo	A
M395	Glass	multicolor	refer to photo	A
M402	Ceramic	black/white	refer to photo	A
M406	Plastic	black	refer to photo	B
M407	Plastic	white	refer to photo	B
M410	Plastic	grey	refer to photo	B

**Test Report No.: 244378056a 001**

Page 132 of 148

M413	Plastic	black	refer to photo	B
M416	Plastic	grey	refer to photo	B
M419	Plastic	black	refer to photo	B
M424	Plastic	black	refer to photo	B
M425	Plastic	black	refer to photo	B
M427	Plastic	black	refer to photo	B
M429	Plastic	black	refer to photo	B
M438	PCB board	green	refer to photo	B
M440	Plastic	black	refer to photo	B
M442	PCB board	green	refer to photo	B
M448	Metal	silver	refer to photo	A
M451	Metal	silver	refer to photo	A
M452	Metal	silver	refer to photo	A
M453	Metal	silver	refer to photo	A
M454	Metal	silver	refer to photo	A
M455	Metal	silver	refer to photo	A
M456	Metal	silver	refer to photo	A
M457	Metal	silver	refer to photo	A
M458	Metal	silver	refer to photo	A
M459	Metal	silver	refer to photo	A
M460	Metal	silver	refer to photo	A
M461	Metal	silver	refer to photo	A
M462	Metal	silver	refer to photo	A
M464	Plastic	black	refer to photo	B
M466	Metal	silver	refer to photo	A
M467	Metal	silver	refer to photo	A
M468	Plastic	black	refer to photo	B
M482	Metal	silver	refer to photo	A
M484	Plastic	black	refer to photo	B
M486	Metal	silver	refer to photo	A
M487	Metal	silver	refer to photo	A
M489	Plastic	black	refer to photo	B
M495	PCB board	green	refer to photo	B
M498	Plastic	black	refer to photo	B
M499	Metal	silver	refer to photo	A
M500	Metal	silver	refer to photo	A
M501	Metal	silver	refer to photo	A

**Test Report No.: 244378056a 001**

Page 133 of 148

M502	Plastic	black	refer to photo	B
M512	Plastic	grey	refer to photo	B
M518	Plastic	white	refer to photo	B
M525	Plastic	grey	refer to photo	B
M526	Plastic	black	refer to photo	B
M531	Plastic	black	refer to photo	B
M533	Plastic	black	refer to photo	B
M534	Plastic	grey	refer to photo	B
M535	Plastic	black	refer to photo	B
M541	Plastic	black	refer to photo	B
M544	Plastic	black	refer to photo	B
M546	Plastic	black	refer to photo	B
M547	Plastic	black	refer to photo	B
M549	Plastic	black	refer to photo	B
M553	Plastic	black	refer to photo	B
M561	Plastic	multicolor	refer to photo	B
M562	PCB board	green	refer to photo	B
M564	PCB board	green	refer to photo	B
M566	Ceramic	black/white	refer to photo	A
M568	PCB board	green	refer to photo	B

**Abbreviation:** HM (Heavy metal) = Cd, Pb, Hg, Cr (VI)  
FR (Flame Retardant) = PBBs, PBDEs

**Test Result:**

	Cd	Cr(VI)	Pb	Hg	PBBs (*)	PBDEs (*)
<b>Maximum Permissible Limit (%)</b>	0.01	0.1	0.1	0.1	0.1	0.1

Material No.	RL(%)					
	Cd					
	Cr^					
	Pb					
Hg						
PBBs (*)						
PBDEs (*)						
M008	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M011	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M020	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M021	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M035	n.a.	n.a.	n.a.	n.a.	< RL	< RL

**Test Report No.: 244378056a 001**

Page 134 of 148

M040	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M054	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M056	n.a.	n.a.	n.a.	n.a.	< RL	0.0007
M060	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M063	n.a.	n.a.	47.8 *3	n.a.	n.a.	n.a.
M066	n.a.	n.a.	3.97 *3	n.a.	n.a.	n.a.
M069	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M077	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M080	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M083	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M086	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M097	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M098	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M101	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M102	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M104	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M105	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M109	n.a.	n.a.	n.a.	n.a.	< RL	0.0009
M114	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M137	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M146	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M160	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M161	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M172	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M175	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M178	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M181	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M182	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M185	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M188	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M190	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M195	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M205	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M207	n.a.	n.a.	38.9 *3	n.a.	n.a.	n.a.

**Test Report No.: 244378056a 001**

Page 135 of 148

M253	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M257	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M262	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M266	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M271	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M289	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M292	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M294	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M295	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M296	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M300	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M305	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M317	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M321	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M324	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M326	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M329	n.a.	n.a.	0.330 *3	n.a.	n.a.	n.a.
M331	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M334	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M337	< RL	n.a.	61.6 *3	n.a.	n.a.	n.a.
M340	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M342	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M344	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M349	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M358	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M360	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M371	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M395	< RL	n.a.	65.2 *3	n.a.	n.a.	n.a.
M402	n.a.	n.a.	0.316 *3	n.a.	n.a.	n.a.
M406	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M407	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M410	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M413	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M416	n.a.	n.a.	n.a.	n.a.	< RL	< RL

**Test Report No.: 244378056a 001**

Page 136 of 148

M419	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M424	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M425	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M427	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M429	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M438	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M440	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M442	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M464	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M468	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M484	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M489	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M495	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M498	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M502	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M512	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M518	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M525	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M526	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M531	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M533	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M534	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M535	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M541	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M544	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M546	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M547	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M549	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M553	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M561	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M562	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M564	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M566	n.a.	n.a.	0.363 *3	n.a.	n.a.	n.a.
M568	n.a.	n.a.	n.a.	n.a.	< RL	< RL

**Test Report No.: 244378056a 001**

Page 137 of 148

Material No.	Hexavalent Chromium Content ( $\mu\text{g}/\text{cm}^2$ ) (*1) RL: 0.10 $\mu\text{g}/\text{cm}^2$
M019	Negative
M022	Negative
M024	Negative
M031	Negative
M037	Negative
M046	Negative
M048	Negative
M049	Negative
M050	Negative
M051	Negative
M052	Negative
M053	Negative
M143	Negative
M147	Negative
M148	Negative
M149	Negative
M150	Negative
M151	Negative
M153	Negative
M157	Negative
M164	Negative
M199	Negative
M226	Negative
M227	Negative
M228	Negative
M229	Negative
M230	Negative
M231	Negative
M232	Negative
M233	Negative
M234	Negative
M235	Negative
M236	Negative
M237	Negative
M238	Negative
M239	Negative
M240	Negative
M241	Negative

**Test Report No.: 244378056a 001**

Page 138 of 148

M242	Negative
M243	Negative
M250	Negative
M256	Negative
M259	Negative
M261	Negative
M263	Negative
M264	Negative
M267	Negative
M319	Negative
M320	Negative
M372	Negative
M374	Negative
M375	Negative
M376	Negative
M377	Negative
M378	Negative
M379	Negative
M380	Negative
M381	Negative
M382	Negative
M383	Negative
M384	Negative
M385	Negative
M392	Negative
M448	Negative
M451	Negative
M452	Negative
M453	Negative
M454	Negative
M455	Negative
M456	Negative
M457	Negative
M458	Negative
M459	Negative
M460	Negative
M461	Negative
M462	Negative
M466	Negative
M467	Negative
M482	Negative

**Test Report No.: 244378056a 001**

Page 139 of 148

M486	Negative
M487	Negative
M499	Negative
M500	Negative
M501	Negative

Material No.	Hexavalent Chromium Content (%) (*2) RL: 0.01%
M275	< RL

**Abbreviation:**

Pb	= Lead
Cd	= Cadmium
Hg	= Mercury
Cr	= Chromium
Cr (VI)	= Chromium (VI)
PBBs	= Total Polybrominated Biphenyls
PBDEs	= Total Polybrominated Diphenyl Ethers
<	= less than
RL	= Reporting Limit
n.a.	= Not Applicable
^	= The total Chromium have been determined
%	= percentage

**Remark:**

- (\*1) The total chromium content in Metal sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm <sup>2</sup>	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating
Inconclusive	≥0.1µg/cm <sup>2</sup> and ≤0.13 µg/cm <sup>2</sup>	The result is considered to be inconclusive. Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
Positive	>0.13 µg/cm <sup>2</sup>	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

- \*3 According to UK RoHS Statutory Instrument 2012/3032 and its amendments, Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound is exempted from requirement.

**Test Report No.: 244378056a 001**

Page 140 of 148

\* The reporting limit for each individual PBBs and individual PBDEs are :

Reporting Limit (%)		
<b>PBBs</b>	Bromobiphenyl	0.0001
	Dibromobiphenyl	0.0001
	Tribromobiphenyl	0.0001
	Tetrabromobiphenyl	0.0001
	Pentabromobiphenyl	0.0002
	Hexabromobiphenyl	0.0002
	Heptabromobiphenyl	0.0002
	Octabromobiphenyl	0.0005
	Nonabromobiphenyl	0.0005
	Decabromobiphenyl	0.0005
<b>PBDEs</b>	Bromodiphenylether	0.0001
	Dibromodiphenyl ether	0.0001
	Tribromodiphenyl ether	0.0001
	Tetrabromodiphenyl ether	0.0001
	Pentabromodiphenyl ether	0.0002
	Hexabromodiphenyl ether	0.0002
	Heptabromodiphenyl ether	0.0002
	Octabromodiphenyl ether	0.0005
	Nonabromodiphenyl ether	0.0005
	Decabromodiphenyl ether	0.0005

(\*2) The total chromium content in plastic sample or electronic sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content have been confirmed with reference to IEC 62321-7-2:2017.

**Test Report No.: 244378056a 001**

Page 141 of 148

**BBP, DBP, DEHP, DIBP content**

Test Method: IEC 62321-8:2017

**Test Result:**

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	RL (%)			
		BBP	DBP	DEHP	DIBP
		RL (%)			
		0.005	0.005	0.005	0.005
T001	M002 + M008 + M021	< RL	< RL	< RL	< RL
T002	M003	< RL	< RL	< RL	< RL
T003	M005	< RL	< RL	< RL	< RL
T004	M006	< RL	< RL	< RL	< RL
T005	M007	< RL	< RL	< RL	< RL
T006	M009	< RL	< RL	< RL	< RL
T007	M010	< RL	< RL	< RL	< RL
T008	M011	< RL	< RL	< RL	< RL
T009	M012	< RL	< RL	< RL	< RL
T010	M013	< RL	< RL	< RL	< RL
T011	M015	< RL	< RL	< RL	< RL
T012	M018	< RL	< RL	< RL	< RL
T013	M020	< RL	< RL	< RL	< RL
T014	M027	< RL	< RL	< RL	< RL
T015	M028 + M035 + M040	< RL	< RL	< RL	< RL
T016	M029	< RL	< RL	< RL	< RL
T017	M032	< RL	< RL	< RL	< RL
T018	M033	< RL	< RL	< RL	< RL
T019	M036	< RL	< RL	< RL	< RL
T020	M039	< RL	< RL	< RL	< RL
T021	M041	< RL	< RL	< RL	< RL
T022	M042	< RL	< RL	< RL	< RL
T023	M054 + M078 + M097	< RL	< RL	< RL	< RL
T024	M056 + M058 + M060	< RL	< RL	< RL	< RL
T025	M057	< RL	< RL	< RL	< RL
T026	M059	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 142 of 148

T027	M061	< RL	< RL	< RL	< RL
T028	M069 + M077 + M086	< RL	< RL	< RL	< RL
T029	M071	< RL	< RL	< RL	< RL
T030	M074	< RL	< RL	< RL	< RL
T031	M076	< RL	< RL	< RL	< RL
T032	M080	< RL	< RL	< RL	< RL
T033	M083	< RL	< RL	< RL	< RL
T034	M084	< RL	< RL	< RL	< RL
T035	M085	< RL	< RL	< RL	< RL
T036	M089	< RL	< RL	< RL	< RL
T037	M090 + M091 + M098	< RL	< RL	< RL	< RL
T038	M099 + M100 + M101	< RL	< RL	< RL	< RL
T039	M102 + M103 + M104	< RL	< RL	< RL	< RL
T040	M105 + M109 + M116	< RL	< RL	< RL	< RL
T041	M107	< RL	< RL	< RL	< RL
T042	M114	< RL	< RL	< RL	< RL
T043	M115	< RL	< RL	< RL	< RL
T044	M119 + M121 + M125	< RL	< RL	< RL	< RL
T045	M123	< RL	< RL	< RL	< RL
T046	M124	< RL	< RL	< RL	< RL
T047	M126	< RL	< RL	< RL	< RL
T048	M127	< RL	< RL	< RL	< RL
T049	M129	< RL	< RL	< RL	< RL
T050	M131 + M133 + M136	< RL	< RL	< RL	< RL
T051	M137 + M001 + M043	< RL	< RL	< RL	< RL
T052	M140 + M144 + M146	< RL	< RL	< RL	< RL
T053	M141	< RL	< RL	< RL	< RL
T054	M142	< RL	< RL	< RL	< RL
T055	M145	< RL	< RL	< RL	< RL
T056	M154	< RL	< RL	< RL	< RL
T057	M156	< RL	< RL	< RL	< RL
T058	M158	< RL	< RL	< RL	< RL
T059	M160 + M205	< RL	< RL	< RL	< RL
T060	M161 + M175 + M178	< RL	< RL	< RL	< RL
T061	M166	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 143 of 148

T062	M168	< RL	< RL	< RL	< RL
T063	M170	< RL	< RL	< RL	< RL
T064	M171	< RL	< RL	< RL	< RL
T065	M172	< RL	< RL	< RL	< RL
T066	M173	< RL	< RL	< RL	< RL
T067	M174	< RL	< RL	< RL	< RL
T068	M176	< RL	< RL	< RL	< RL
T069	M177	< RL	< RL	< RL	< RL
T070	M181 + M182 + M185	< RL	< RL	< RL	< RL
T071	M188 + M190 + M195	< RL	< RL	< RL	< RL
T072	M192	< RL	< RL	< RL	< RL
T073	M193	< RL	< RL	< RL	< RL
T074	M197	< RL	< RL	< RL	< RL
T075	M198	< RL	< RL	< RL	< RL
T076	M200	< RL	< RL	< RL	< RL
T077	M202	< RL	< RL	< RL	< RL
T078	M208	< RL	< RL	< RL	< RL
T079	M209	< RL	< RL	< RL	< RL
T080	M211 + M212	< RL	< RL	< RL	< RL
T081	M214	< RL	< RL	< RL	< RL
T082	M216 + M217 + M224	< RL	< RL	< RL	< RL
T083	M218	< RL	< RL	< RL	< RL
T084	M220	< RL	< RL	< RL	< RL
T085	M221	< RL	< RL	< RL	< RL
T086	M223	< RL	< RL	< RL	< RL
T087	M245	< RL	< RL	< RL	< RL
T088	M247	< RL	< RL	< RL	< RL
T089	M248	< RL	< RL	< RL	< RL
T090	M249	< RL	< RL	< RL	< RL
T091	M251 + M253 + M257	< RL	< RL	< RL	< RL
T092	M252	< RL	< RL	< RL	< RL
T093	M254	< RL	< RL	< RL	< RL
T094	M258	< RL	< RL	< RL	< RL
T095	M262	< RL	< RL	< RL	< RL
T096	M266 + M288 + M289	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 144 of 148

T097	M268	< RL	< RL	< RL	< RL
T098	M269	< RL	< RL	< RL	< RL
T099	M270	< RL	< RL	< RL	< RL
T100	M271 + M358 + M360	< RL	< RL	< RL	< RL
T101	M272	< RL	< RL	< RL	< RL
T102	M273	< RL	< RL	< RL	< RL
T103	M274	< RL	< RL	< RL	< RL
T104	M280	< RL	< RL	< RL	< RL
T105	M281	< RL	< RL	< RL	< RL
T106	M286	< RL	< RL	< RL	< RL
T107	M287	< RL	< RL	< RL	< RL
T108	M290	< RL	< RL	< RL	< RL
T109	M292 + M294 + M295	< RL	< RL	< RL	< RL
T110	M296 + M301 + M302	< RL	< RL	< RL	< RL
T111	M300	< RL	< RL	< RL	< RL
T112	M305 + M309 + M310	< RL	< RL	< RL	< RL
T113	M307	< RL	< RL	< RL	< RL
T114	M308	< RL	< RL	< RL	< RL
T115	M313	< RL	< RL	< RL	< RL
T116	M314 + M316 + M317	< RL	< RL	< RL	< RL
T117	M321 + M323 + M324	< RL	< RL	< RL	< RL
T118	M326 + M340 + M342	< RL	< RL	< RL	< RL
T119	M327	< RL	< RL	< RL	< RL
T120	M331	< RL	< RL	< RL	< RL
T121	M332	< RL	< RL	< RL	< RL
T122	M333	< RL	< RL	< RL	< RL
T123	M334	< RL	< RL	< RL	< RL
T124	M335	< RL	< RL	< RL	< RL
T125	M336	< RL	< RL	< RL	< RL
T126	M344 + M349 + M352	< RL	< RL	< RL	< RL
T127	M347	< RL	< RL	< RL	< RL
T128	M350	< RL	< RL	< RL	< RL
T129	M355	< RL	< RL	< RL	< RL
T130	M356	< RL	< RL	< RL	< RL
T131	M357	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 145 of 148

T132	M361	< RL	< RL	< RL	< RL
T133	M364 + M366 + M371	< RL	< RL	< RL	< RL
T134	M365	< RL	< RL	< RL	< RL
T135	M367 + M446 + M445	< RL	< RL	< RL	< RL
T136	M369	< RL	< RL	< RL	< RL
T137	M370	< RL	< RL	< RL	< RL
T138	M386	< RL	< RL	< RL	< RL
T139	M388	< RL	< RL	< RL	< RL
T140	M390	< RL	< RL	< RL	< RL
T141	M391	< RL	< RL	< RL	< RL
T142	M393	< RL	< RL	< RL	< RL
T143	M396	< RL	< RL	< RL	< RL
T144	M397	< RL	< RL	< RL	< RL
T145	M398	< RL	< RL	< RL	< RL
T146	M400 + M404 + M406	< RL	< RL	< RL	< RL
T147	M407	< RL	< RL	< RL	< RL
T148	M408	< RL	< RL	< RL	< RL
T149	M409	< RL	< RL	< RL	< RL
T150	M410 + M413 + M416	< RL	< RL	< RL	< RL
T151	M411	< RL	< RL	< RL	< RL
T152	M412	< RL	< RL	< RL	< RL
T153	M417	< RL	< RL	< RL	< RL
T154	M419	< RL	< RL	< RL	< RL
T155	M420	< RL	< RL	< RL	< RL
T156	M424 + M425 + M427	< RL	< RL	< RL	< RL
T157	M429 + M437 + M440	< RL	< RL	< RL	< RL
T158	M432	< RL	< RL	< RL	< RL
T159	M435	< RL	< RL	< RL	< RL
T160	M436	< RL	< RL	< RL	< RL
T161	M438 + M442	< RL	< RL	< RL	< RL
T162	M444	< RL	< RL	< RL	< RL
T163	M445 + M447 + M464	< RL	< RL	< RL	< RL
T164	M449	< RL	< RL	< RL	< RL
T165	M450	< RL	< RL	< RL	< RL
T166	M463	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 146 of 148

T167	M465	< RL	< RL	< RL	< RL
T168	M468 + M472 + M484	< RL	< RL	< RL	< RL
T169	M469	< RL	< RL	< RL	< RL
T170	M474	< RL	< RL	< RL	< RL
T171	M475	< RL	< RL	< RL	< RL
T172	M477	< RL	< RL	< RL	< RL
T173	M479	< RL	< RL	< RL	< RL
T174	M480	< RL	< RL	< RL	< RL
T175	M481	< RL	< RL	< RL	< RL
T176	M483	< RL	< RL	< RL	< RL
T177	M489 + M502 + M511	< RL	< RL	< RL	< RL
T178	M490	< RL	< RL	< RL	< RL
T179	M491	< RL	< RL	< RL	< RL
T180	M492	< RL	< RL	< RL	< RL
T181	M496	< RL	< RL	< RL	< RL
T182	M498	< RL	< RL	< RL	< RL
T183	M505	< RL	< RL	< RL	< RL
T184	M507	< RL	< RL	< RL	< RL
T185	M508	< RL	< RL	< RL	< RL
T186	M509	< RL	< RL	< RL	< RL
T187	M512 + M520 + M525	< RL	< RL	< RL	< RL
T188	M513	< RL	< RL	< RL	< RL
T189	M515	< RL	< RL	< RL	< RL
T190	M517	< RL	< RL	< RL	< RL
T191	M518	< RL	< RL	< RL	< RL
T192	M519	< RL	< RL	< RL	< RL
T193	M522	< RL	< RL	< RL	< RL
T194	M526 + M527 + M531	< RL	< RL	< RL	< RL
T195	M528	< RL	< RL	< RL	< RL
T196	M533 + M534 + M535	< RL	< RL	< RL	< RL
T197	M536 + M539 + M540	< RL	< RL	< RL	< RL
T198	M541 + M543 + M544	< RL	< RL	< RL	< RL
T199	M546 + M547 + M549	< RL	< RL	< RL	< RL
T200	M553 + M561 + M495	< RL	< RL	< RL	< RL
T201	M556	< RL	< RL	< RL	< RL

**Test Report No.: 244378056a 001**

Page 147 of 148

T202	M558	< RL	< RL	< RL	< RL
T203	M560	< RL	< RL	< RL	< RL
T204	M562 + M564 + M568	< RL	< RL	< RL	< RL

**Abbreviation:** BBP= Benzylbutyl phthalate  
DBP= Dibutyl phthalate  
DEHP= Bis(2-ethylhexyl) phthalate  
DIBP= Diisobutyl phthalate  
< = less than  
RL = Reporting Limit  
N.A. = Not Applicable  
%= percentage

**Test Report No.: 244378056a 001**

Page 148 of 148

Sample Photos



- END -

# General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. **Scope**
  - 1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTCS") is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China hereof refers to Mainland China, Hong Kong and Taiwan. The client hereof includes:
    - (i) a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;
    - (ii) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.
  - 1.2 The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.
  - 1.3 Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.
  - 1.4 In the context of an ongoing business relationship with the client, this GTCS shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.
2. **Quotations**

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.
3. **Coming into effect and duration of contracts**
  - 3.1 The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice regarding electronic transfers) or by commencing work on the contract.
  - 3.2 The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.
  - 3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a six-week notice prior to the end of the contractual term.
4. **Scope of services**
  - 4.1 The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed services provided by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided.
  - 4.2 The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.
  - 4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.
  - 4.4 On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organizations, use and application in accordance with regulations, not of the systems in which the installation is based. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations, unless otherwise expressly agreed by the client.
  - 4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.
  - 4.6 If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.
  - 4.7 The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreed services. This also applies if the client passes on work results - in full or in extracts - to third parties in accordance with clause 11.4.
5. **Performance periods/dates**
  - 5.1 The contractually agreed periods/dates of performance are based on estimates of the work involved and are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.
  - 5.2 If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.
  - 5.3 Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland.
  - 5.4 TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.
  - 5.5 If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds, at least to the duration of the hindrance plus any time period which may be required to resume performance.
6. **The client's obligation to cooperate**
  - 6.1 The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.
  - 6.2 Design documents, supplies, auxiliary staff, etc., necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that:
    - a) it has required statutory qualifications;
    - b) the product, service or management system to be certified complies with applicable laws and regulations; and
    - c) it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to i) immediately terminate the contract/order without prior notice; and ii) withdraw the issued testing certificates if any.
  - 6.3 The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.
7. **Prices**
  - 7.1 If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.
  - 7.2 Unless otherwise agreed, work shall be invoiced according to the progress of the work.
  - 7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.
8. **Payment terms**
  - 8.1 All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts and rebates shall be granted.
  - 8.2 Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.
  - 8.3 In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.
  - 8.4 Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue the contract.
  - 8.5 The provisions set forth in article 8.4 shall also apply in cases involving retained cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.
  - 8.6 Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.
  - 8.7 TÜV Rheinland shall be entitled to demand appropriate advance payments.
  - 8.8 TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notice shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.
  - 8.9 Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.
  - 8.10 TÜV Rheinland shall have the right at all times to set off any amount due or payable by the client, including but not limited to set off against any fees paid by the client under any contracts, agreement and/or orders/quotations reached with TÜV Rheinland.
9. **Acceptance of work**
  - 9.1 Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.
  - 9.2 If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this period stating at least one fundamental breach of contract by TÜV Rheinland.
  - 9.3 The client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.
  - 9.4 If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.
  - 9.5 During the Follow-Audit stage, if the client was unable to make use of the time windows provided for within the scope of a certification procedure for auditing/performance by TÜV Rheinland and the certificate is therefore withheld (e.g. as a result of surveillance or re-audit), TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for expenses. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above lump sum.
  - 9.6 Insofar as the client has undertaken in the contract to accept services, TÜV Rheinland shall also be entitled to charge lump-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.
10. **Confidentiality**
  - 10.1 For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, documents, images, drawings, expertise, information, data, test results, reports, samples, project documents, pricing and financial information, customer and supplier information, and marketing techniques and materials, tangible or intangible, that are supplied, transferred or otherwise disclosed to the Party (the "disclosing party") by the other Party (the "receiving party"), in writing or orally, in printed or electronic form. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal and not proprietary to the client) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and analysing the provision of services. The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed of the disclosure and the disclosure shall be confirmed in writing of the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information. The client shall avoid using any third party platform and/or system (e.g. Wechat, Dingding, etc.). Unauthorized by TÜV Rheinland) to send any confidential information to TÜV Rheinland. Instead, the client shall send any confidential information to company servers of TÜV Rheinland employees through its confidential information disclosure system or via email or damages due to any theft or leakages to be caused by the adoption of any unauthorized confidential information sharing methods mentioned above, TÜV Rheinland shall be waived for any compensation liabilities.
  - 10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland:
    - a) may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party;
    - b) may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial authorities, accreditation bodies or third parties that are involved in the performance of the contract;
    - c) must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protect its own confidential information, but never with a lesser level of confidentiality than that which is reasonably required.
  - 10.4 The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to observe the same level of secrecy as set forth in this confidentiality clause.
  - 10.5 Information for which the receiving party can furnish proof that:
    - a) it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or
    - b) it was disclosed to the receiving party by a third party entitled to disclose this information; or
    - c) the receiving party already possessed this information prior to disclosure by the disclosing party; or
    - d) the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.
  - 10.6 All confidential information shall remain the property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and to ensure the destruction of this confidential information to the disclosing party in writing, at any time if so requested by the disclosing party but at the latest and without special request after termination or expiry of the contract. This does not extend to duplicate reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract which shall remain with the client. However, TÜV Rheinland is entitled to make file copies of reports and certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.
  - 10.7 From the start of the contract and for a period of three years after termination or expiry of the contract the receiving party shall maintain strict confidentiality of all confidential information and shall not disclose this information to any third parties or use it for itself.
11. **Copyrights and rights of use, publications**
  - 11.1 TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, calculations, presentations etc., prepared by TÜV Rheinland, unless otherwise agreed in writing in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use ("right of use")
  - 11.2 The client receives a simple, unlimited, non-transferable, non-sub licensable right of use to the contents of the work results produced within the scope of the contract, unless otherwise agreed by the parties in a separate agreement. The client may only use such reports, expert reports/opinions, test reports/results, results, calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.
  - 11.3 The transfer of right of use of the generated work results regulated in clause 11.2. of the GTCS is subject to full payment of the remuneration agreed in favour of TÜV Rheinland.
  - 11.4 The client may use work results only complete and unshortened. The client may only pass on the work results in full unless TÜV Rheinland has given its prior written consent to the partial passing on of work results.
  - 11.5 Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope regulated in clause 11.2. needs the prior written approval of TÜV Rheinland in each individual case.
  - 11.6 TÜV Rheinland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw publications.
  - 11.7 The consent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification mark of TÜV Rheinland.
12. **Liability of TÜV Rheinland**
  - 12.1 Irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overhead fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annual recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.
  - 12.2 The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.
  - 12.3 In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseen as a possible consequence of such breach of contract at the time of the breach (reasonably foreseen damages) unless any other amount is expressly agreed in writing in a separate agreement.
  - 12.4 TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.
  - 12.5 Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client.
  - 12.6 The limitation periods for claims for damages shall be based on statutory provisions.
  - 12.7 None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.
13. **Export control**
  - 13.1 When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.
  - 13.2 The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign trade legislations or embargoes and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incurred thereof by TÜV Rheinland.
14. **Data protection notice**

TÜV Rheinland processes personal data of the client for the purpose of fulfilling this contract. In addition, TÜV Rheinland also processes the data for other legal purposes in accordance with the relevant legal basis. The personal data of the client will only be disclosed to other natural or legal persons if the legal requirements are met. This also applies to transfers to third countries. The personal data will be deleted immediately as soon as the corresponding reason for processing has ceased. The client may exercise the following rights: right of information, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. In addition, persons concerned by the data processing have the right to request correction of their data at any time with effect for the future, as well as the right to file a complaint with the competent data protection supervisory authority. For further details on the processing of personal data by the client as the person responsible or contract processor, please refer to the relevant data protection policy of the client. You can contact your Data Protection Officer of TÜV Rheinland by e-mail at datenschutz@tuv.rh.de or by post at the following address: TÜV Rheinland AG, c/o Group Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.
15. **Test materials/samples: transport risk and storage**
  - 15.1 The risk and costs for freight and transport of documents or test materials/samples to and from TÜV Rheinland as well as the costs of necessary disposal measures shall be borne by the client. TÜV Rheinland will be only liable for the direct loss of test materials/samples in the laboratories or warehouses of TÜV Rheinland only in case of gross negligence.
  - 15.2 Any destroyed and otherwise worthless test materials/samples will be disposed of by TÜV Rheinland for the client at the expense of the client, unless otherwise agreed.
  - 15.3 Undamaged test materials/samples shall be stored by TÜV Rheinland for four (4) weeks after completion of the test. If a longer storage period is desired, TÜV Rheinland charges an appropriate storage fee.
  - 15.4 After the expiry of the four weeks or any longer period agreed upon, the test materials/samples will be disposed of by TÜV Rheinland for the client for a fee in accordance with clause 15.2.
  - 15.5 If test materials/samples or documents are given to the client to be placed in storage at their premises, the test materials/samples or documents must be made available to TÜV Rheinland upon request promptly and free of charge. If the client's response to such a request is incapable of making available the test materials/samples and/or documentation, any liability claims for material and pecuniary damage resulting from the respective testing and certification that is brought forward by the client against TÜV Rheinland shall be voided.
16. **Termination of the contract**
  - 16.1 Notwithstanding clause 3.3 of the GTCS, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or in the case of services combined in one contract, each of the combined parts of the contract individually and independently of the continuation of the remaining services with six (6) months' notice to the end of the contractually agreed term. The notice period shall be shortened to six (6) weeks in case TÜV Rheinland is prevented from performing the services due to a loss or a suspension of its accreditation or notification.
    - 16.2 For good cause, TÜV Rheinland may consider giving a written notice to the client to terminate the contract which includes but not limited to the following:
      - a) the client does not immediately notify TÜV Rheinland of changes in the conditions within the company which are relevant for certification or signs of such changes;
      - b) the client misses the certificate or certification mark or uses it in violation of the contract;
      - c) in the event of several consecutive delays in payment (at least three times);
      - d) a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contractual relationship;
      - e) in the event of any serious misrepresentation, be it by intentional fraud or grossly negligent behavior of the managers, employees or agents of the client;
      - f) if TÜV Rheinland, for reasons beyond its control, is temporarily or finally not able or entitled to continue or finalize the performance of the services, e.g. in case of force majeure, government interference, sanctions, loss of accreditation or notification, or other.
    - 16.3 In the event of termination with written notice by TÜV Rheinland for good cause, TÜV Rheinland shall be entitled to a lump-sum claim for damages against the client if the conditions of a claim for damages exist. In this case, the client shall pay 5% of the remuneration to be paid until the end of the fixed contract term as lump-sum compensation. The client reserves the right to prove that there is no damage or a considerably lower damage. TÜV Rheinland reserves the right to prove a considerably higher damage in individual cases.
    - 16.4 TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to make use of the time windows for auditing /service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.
  17. **Force Majeure**
    - 17.1 "Force Majeure" means the occurrence of an event or circumstance that prevents or impedes a Party from performing one or more of its contractual obligations under the contract, if and to the extent that that Party proves that the event or circumstance is beyond its control, and that the event or circumstance could not have been foreseen at the time of the conclusion of the contract; and (c) that the effects of the impediment could not reasonably have been avoided or overcome by the affected Party.
    - 17.2 In the absence of proof to the contrary, the following events affecting a Party shall be presumed to fulfil conditions (a) and (b) under paragraph 1 of this Clause: (i) war (whether declared or not), hostilities, invasion, act of foreign enemies, extensive military mobilization; (ii) civil war, riot, rebellion and revolution, military or usurped power, insurrection, act of terrorism, sabotage or piracy; (iii) currency and trade restrictions, embargoes, export controls, trade sanctions, economic system or energy; (iv) general labor disturbance such as governmental order, expropriation, seizure of works, requisition, nationalization; (v) plague, epidemic, natural or extreme natural event; (vi) explosion, fire, destruction of equipment, prolonged breakdown of transport, telecommunication, information system or energy; (vii) general labor disturbance such as boycott, strike and lock-out, go-slow, occupation of factories and premises.
    - 17.3 The Party successfully invoking this Clause is relieved from its duty to perform its obligations under the contract and from any liability in damages or from any other contractual remedy for breach of contract, from the time at which the impediment causes inability to perform, provided that the notice thereof is given without delay. If notice thereof is not given without delay, the relief is effective from the time at which notice thereof reaches the other Party. Where the effect of the impediment or event invoked is temporary, the above consequences shall apply only so long as the impediment invoked impedes performance of the affected Party. Where the duration of the impediment invoked has the effect of substantially depriving the contracting Parties of what they were reasonably entitled to expect under the contract, either Party has the right to terminate the contract by notification within a reasonable period to the other Party. Unless otherwise agreed, the Parties expressly agree that the contract may be terminated by either Party if the duration of the impediment exceeds 120 days.
  18. **Hardship**
    - 18.1 The Parties are bound to perform their contractual duties even if events have rendered performance more onerous than could reasonably be foreseen anticipated at the time of the conclusion of the contract.
    - 18.2 Notwithstanding paragraph 1 of this Clause, where a Party proves that:
      - (a) the continued performance of its contractual duties has become excessively onerous due to an event beyond its reasonable control which it could not reasonably have been expected to have taken into account at the time of the conclusion of the contract; and that
      - (b) it could not reasonably have avoided or overcome the event or its consequences, the Parties are bound, within a reasonable time of the invocation of this Clause, to negotiate alternative contractual terms which reasonably allow it to overcome the consequences of the event.
    - 18.3 Where Clause 18.2 applies, but where the Parties have been unable to agree alternative contractual terms as provided in that paragraph, the Party invoking this Clause is entitled to terminate the contract, but cannot request adaptation by the judge or arbitrator without the agreement of the other Party.
  19. **Partial invalidity, written form, place of jurisdiction and dispute resolution**
    - 19.1 All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.
    - 19.2 Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.
    - 19.3 Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:
      - a) If TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.
      - b) If TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan.
      - c) If TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.
    - 19.4 Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations. Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:
      - a) in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China to the International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party;
      - b) in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association, Taipei to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei;
      - c) in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these Rules. The arbitration shall take place in Hong Kong.The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.