

RELIABILITY TEST REPORT

TESTITEM : 1.ELECTRICAL 2.MECHANICAL **3.ENV IRONMENTAL**

SERIES NO.: 0.8mm Board to Board CBRD series

TEST EQUIPMENT : 1.INSERTION & REMOVAL APPARATUS 2. ELECTRONIC MEASURING APPARATUS **3.ENV IRONMENTAL APPARATUS**

DATE OF TESTING: 3/27/09'

TEST DEPART : R&D TESTER : Kevin.Wu

CONTAINT : ATTACHED

REVIEWED : Alex APPROVED : David VERIFIED : Kevin



1.ELECTRICAL PERFORMANCE :

	ITEM	TEST CONDITION	REQUIREMENT	TES	TEST RESULT		
1-1	Low-signal Level	Mate connectors, measure	$40 \text{ m}\Omega$ Max.	Sample	40 mΩ max. 30.7		
	Contact resistance	by dry circuit,	Change allowed	1			
		20 mV Max., 10 mA Max.	enunge uno weu	2	30	30.5	
		,		3		30.3	
				4		0.4	
				5).5	
				6		.4	
1-2	Insulation resistance	Unmate connector, apply	1000 MΩ Min.	Sample	1000 M		
		DV 500 V between		-	Male	Female	
		adjacent terminals.		1		7.5×10^{6}	
				2		7.5×10^{6}	
				3		7.5×10^{6}	
				4		7.5×10^{6}	
				3	7.6X10	7.6×10^{6}	
1-3	Dielectric Withstanding Voltage	Test between adjacent contacts of	250 V AC Min. at sea level for 1	Sample	Male	Female	
	withstanding voltage	Unmated connectors.	minute,	1	OK	OK	
		Chinaced connectors.	No discharge,	2	OK	OK	
			flashover	3	OK	OK	
			Or breakdown.	4	OK	OK	
				5	OK	OK	
			Current leakage:				
			1mA Max.				

2. MECHANICAL PERFORMANCE :

	ITEM	TEST CONDITION	REQUIREMENT	TEST RESULT	
2-1	Durability	The sample should be	30 cycles.	Sample	mΩ
	5	mounted in the tester and	5	1	34.2
		fully mated and unmated		2	33.8
		the number of cycles		3	34.1
		specified at the rate of $25\pm$		4	34.3
		3mm/min.		5	33.9
				6	33.9

TEST CONDITION

TEST RESULT

瀚荃股	份有限公司
CviLux	Corporation

Force (Reference)				01 001 0 1 0 1		L	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2-2	0 0	Speed 25±3 mm per minute	-		Mating	Unmating
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		Force (Reference)			1	0.930	1.011
2-3 Terminal/Housing Retention forc Apply axial pull out force at thespeed rate Of 25± 3 mm/min. On the terminal assembled in the housing. 0.4 kgf Min. 3 0.943 1.161 4 0.981 1.140 5 0.940 1.110 12 PIN H=5.0 Mating Unmating 1 0.910 1.122 2 0.879 0.930 3 0.801 0.981 1 0.912 1.092 5 0.902 1.029 5 0.902 1.029 1 0.859 0.666 2 0.915 1.145 3 0.981 1.044 4 0.917 1.019 5 0.889 0.882 2-3 Terminal/Housing Apply axial pull out force at thespeed rate 0.4 kgf Min. 0 1 0.494 0.692 2 0.492 0.722 3 0.502 1.077 4 0.481 0.755							
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				Unmating force			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				•	4	0.981	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				Contacts kgf Min.)	5	0.940	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						Mating	Unmating
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					1	0.910	1.122
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					2	0.879	0.930
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					3	0.801	0.981
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					4	0.912	1.092
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						0.902	1.029
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						Mating	Unmating
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					1	0.859	0.666
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					2	0.915	1.145
2-3Terminal/Housing Retention foreApply axial pull out force at thespeed rate Of 25 ± 3 mm/min. On the terminal assembled in the housing. 0.4 kgf Min. Sample MaleMale Female 1 0.494 0.692 2 0.492 0.722 3 0.502 1.077 4 0.481 0.755					3	0.981	1.044
2-3Terminal/Housing Retention forcApply axial pull out force at thespeed rate Of 25± 3 mm/min. On the terminal assembled in the housing.0.4 kgf Min.SampleMaleFemale20.4920.72230.5021.07740.4810.755						0.917	1.019
Retention forc1 0.494 0.692 Construction forcConstruction forcConstruc					-		0.882
Interpret full $1000000000000000000000000000000000000$	2-3	Terminal/Housing	Apply axial pull out force at	0.4 kgf Min.	Sample		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Retention forc	thespeed rate		-		
the housing. $4 0.481 0.755$			Of 25± 3 mm/min.		2	0.492	0.722
			On the terminal assembled in		3	0.502	1.077
5 0.735 1.059			the housing.		4	0.481	0.755
					5	0.735	1.059
6 0.644 0.737					6	0.644	0.737



-							
	ПТЕМ	TEST CONDITION	REQUIREMENT	TES	ST RESULT		
3-1	Resistance to Reflow soldering heat	Pre Heat : 150°C Max, 90sec Min.	No damage	Sample	No da Male	image Female	
	soldoring neur			1	OK	OK	
		Heat : 200°C Min., 30sec		2	OK	OK	
		Min.		3	OK	OK	
		Peak Temp. : 260°C±5°C,		4	OK	OK	
		10sec		5	OK	OK	
3-2	Humidity-	Mated Connector	No damage	Sample		image	
	Temperature cycling	25~65°C, 90-95% RH,		1	Male	Female	
		10 Cycles		2	OK OK	OK OK	
		Reefer to Method IV.		3	OK	OK	
				4	OK	OK	
				5	OK	OK	
			Contact resistance:	Sample		Ω	
			Less than twice of	1	34.1		
			initial	2	34.5		
			IIIIIII	3	34.4		
				4	33.8		
				5	34.2		
				6		.4	
3-3	Salt Spray	Subject mated/unmated	No damage	Sample		image	
		connectors to 5% salt-solution concentration, 35°C for 48 hours.			OK OK		
				23	OK OK		
				4	OK OK		
				5	OK		
				6	OK		
			Contact resistance:	Sample	-		
			Less than twice of initial	1	36.5		
				2	36.8		
				3	36.7		
				4	36.4		
				5	36.7 36.8		
				6 Samula			
3-4	Solder ability	Subject the test area of contacts into the flux for 5- 10 sec. And then into solder bath, Temperature at 245 \pm 5°C,	Minimum: 95% of solder coverage.	Sample 1	95%↑ OK		
				2	OK OK		
				3	OK		
				4	OK		
				5	OK		
		for $4-5$ second					