瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.	PRODUCT SPECIFICATION For DDR S.O DIMM SOCKET of CS69 System	SPEC.NO.: SPCS032A PAGE: 1/4

1. SCOPE:
This specification covers the requirements for product performance, test method and quality assurance provision of the DDR S.O DIMM SOCKET series.

2. APPLICABLE STANDARDS:
MIL - STD - 202 Methods for test of connectors for electronic equipment

3. APPLICABLE SERIES NO.: CS69 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

6. ACCOMMODATED P.C.BOARD
6.1 Thickness: 1.6 mm (.063″)
6.2 P.C. Board Layout: See attached drawings

CVILUX CORP
2012.11.07
ISSUED

REVIEWED : David APPROVED : Eisley VERIFIED : Enya .

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
7.1	Rated current and voltage		0.5A 25V AC (r.m.s.)
7.2	Contact resistance	Sold connectors on PCB and mate them together measure by applying closed circuit current of 10mA maximum at open circuit voltage of 20mV maximum.	60 mΩ Max.(Initial) 80 mΩ Max.(Final)
7.3	Dielectric strength	MIL STD.202F, Method 301 125VAC for 1minute between two adjacent contacts	No breakdown Current leakage: 0.5mA Max.
7.4	Insulation resistance	MIL STD.202F, Method 302 Impressed voltage 100 VDC between two adjacent contacts for one minutes.	500 MΩ Min.(Initial) 100 MΩ Min.(Final)

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Mating and Unmating Durability	Solder connectors on PCB, then repeat mating and unmating 25 cycles along the mating axis.	No damage Contact resistance: 80 mΩ Max.
8.2	Contact Retention Force	Place a connectors on the push-pull machine, then apply a force on the contact head and push the contact to the opposite direction of the contact insertion at the speed of 25±3mm/min. Measure the force when the contact dislodge from insulator	0.1kgf (1 N)/pos. Min.
8.3	Latch Spring Retention Force	Place a connector on the pull-push machine , then apply a force on a contact head and push the latch spring to the opposite direction of the latch spring insertion at the speed of 25± 3mm/min. Measure the force when the latch spring dislodges from insulator.	0.82kgf (8 N)/pos. Min.

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Heat Resistance	MIL STD.202F, Method 108A The specimens shall be subjected to a temperature of 85±2°C for 96 hours, then placed in ambient temperature for more than 1~2 hours.	No damage Contact resistance: 80 mΩ Max.

9.2	Cold Resistance	Temperature: -40±3°C for 96 hours, then placed in ambient temperature for more than 1~2 hours.	No damage Contact resistance: 80 mΩ Max.
9.3	Vibration	MIL STD.202F, Method 201A 1.52 mm 10-55-10 Hz/minute each 2 hours for X,Y and Z directions	Appearance: No damage Discontinuity: 1 micro second Max. Contact resistance: 80 mΩ Max.
9.4	Shock	MIL STD. 202F, Method 213A Accelerated Velocity: 490 m/s^2 (50 G) Waveform: Half sine Duration: 11 m sec. Number of shocks: 3 shocks each to normal and reversed directions of X, Y and Z axes, totally 18 shocks.	Appearance: No damage Discontinuity: 1 micro second Max. Contact resistance: 80 mΩ Max.
9.5	Solder ability	Soldering time: 3 ± 0.5 second Soldering pot: 230 ± 5°	Minimum: 95% of immersed area
9.6	Resistance to soldering heat	Pre Heat: 150±10°C to 215°C for 30~90sec. Reflow:235±5°C Max. 255°C/10 sec. Min. 220°C/20 sec. Duration: 3 cycles Refer to Para.11	No damage
9.7	Hand Soldering	350°C Max. 5sec. Max.	No damage
9.8	Salt spray	Temperature: 35± 1°C Solution: 5± 1% Spray time: 48± 4 hours Measurement must be taken after water rinse	No damage Contact resistance: 80 mΩ Max.
9.9	Humidity	MIL STD.202F, Method 106E Expose to the defined environment condition for 10 cycles. The test specimens shall be conditions at ambient room conditions for 1 of 2 hours, after which the specified measurements shall be performed.	No damage Contact resistance: 80 mΩ Max. Insulation resistance: 100 MΩ Min.

9.10	Thermal Shock	Mated connector -45 ℃ / 30 min., 85 ℃ / 30 min.(5 cycle) Transit time shall be within 3 min. The test specimens shall be conditions for 1 of 2 hours, after which the specified measurements shall be performed.	No damage Contact resistance: 80 mΩ Max.
9.11	SO^2 Gas	Expose to 10ppm SO^2 gas, ambient temperature25± 2°C for 24 hours.	No damage Contact resistance: 80 mΩ Max.

10. AMBIENT TEMPERATURE RANGE: -40 to + 85°C

11. Recommended IR Reflow Temperature Profile: