ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCS031A
DEPT.	For Dual DDR DIMM (DDR3) of CS7040821M0	PAGE:	1/4

1. SCOPE:

This specification covers the requirements for product performance, test method and quality assurance provision of the DUAL DDR DIMM SOCKET series.

2. APPLICABLE STANDARDS:

MIL - STD - 202

Methods for test of connectors for electronic equipment

3. PART NO.: CS7040821M0

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



REVIEWED : <u>David</u> APPROVED : <u>Eisley</u> VERIFIED : <u>Enya</u> .



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
7.1	Rated current and voltage		0.3A 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	250 MΩ Min.(Initial) 50 MΩ Min.(Final)

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Mating Force	Solder connectors on PCB, than place them on the pull-push machine, and repeat mating and unmating at the speed of 100±10mm/min. Along the mating axis.	8.0kgf (78.4 N) Max.
8.2	Durability	and unmating 25 cycles along the mating axis	No damage Contact resistance: 80 mΩ Max.
8.3	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 25±3mm/min. Measure the force when the contact dislodge from insulator	0.1kgf (1 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.



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9.3	Vibration	MIL STD.202F, Method 201A	Appearance: No damage
		1.52 mm 10-55-10 HZ/minute each	Discontinuity:
		2 hours for X,Y and Z directions	1 micro second Max.
			Contact resistance:
			80 mΩ Max.
9.4	Shock	MIL STD. 202F, Method 213B	Appearance: No damage
		Accelerated Velocity: 490 m/s ² (50 G)	Discontinuity:
		Waveform: Half sine	1 micro second Max.
		Duration: 11 m sec. Number of Drops: 3 drops each to normal	Contact resistance:
		and reversed directions of X, Y and Z axes, totally 18 drops.	$80 \text{ m}\Omega$ Max.
9.5	Solder ability	Soldering time: 3 ± 0.5 second	Minimum:
		Soldering pot: 230 ± 5°	95% of immersed area
9.6	Resistance to soldering	Pre Heat: 150 ~ 180°C, 60~120 sec.	No damage
	heat	Reflow:	
		Max. 260°C,10 sec. Min. 230°C,30~60 sec	
		Duration: 2 cycles	
		Refer to Para.11	
9.7	Hand Soldering	360°C Max.	No damage
		3sec. Max.	
9.8	Salt spray	Temperature: 35± 1°C	No damage
		Solution: 5± 1%	Contact resistance:
		Spray time: 48± 4 hours	$80 \text{ m}\Omega \text{ Max}.$
		Measurement must be taken after water rinse	
9.9	Humidity	MIL STD.202F, Method 106E	No damage
	-	Expose to the defined environment condition	Contact resistance:
		for 10 cycles. The test specimens shall be	80 mΩ Max.
		conditions for 1 of 2 hours, after which the specified measurements shall be performed.	Insulation resistance:
		specified measurements shart se performed.	50 MΩ Min.
9.10	Thermal Shock	Mated connector	No damage
		-45 °C / 30 min., 85 °C / 30 min.(5 cycle)	Contact resistance:
		Transit time shall be within 3 min.	80 mΩ Max.
		The test specimens shall be conditions for 1	
		of 2 hours, after which the specified	
		measurements shall be performed.	



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9.11	SO ² Gas	Expose to 10ppm SO ² gas, ambient	No damage
		temperature25± 2°C for 24 hours.	Contact resistance:
			$80 \text{ m}\Omega$ Max.

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

11. Recommended IR Reflow Temperature Profile:

