

Report NO: 12P0A0005_I

FSP084-DMAA1 of ACD-521D Power Electronics Test Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation Comment: _____			
Test Result Summary				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	Approval	Test Engineer
05/31/2012	Vincent Chen	Sean Hsu

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1. Project

FSP084-DMAA1 AC-DC Adapter for ACD-521D

2. Power Manufacturer

FSP

3. Team Member

PM : Alan Chou ; EE : Jack Peng ; ME : Ryo Huang

4. Test Equipment

5.1. Panel : AUO M215HW03 v1 21.5", 1920x1080, LED

5.2. USB Mouse : Logitech , Model : M-BT85

5.3. USB Keyboard : Logitech , Model : Y-BL49

5.4. AD Board : S2523BVL Rev : DV

5.5. Inverter Board : SAMPO M/N : YIDCAA0016DG4

5.6. Mini USB contact touch Board : PER-T219 Rev: A0.3

5.7. USB Board : PER-T194 REV A0.2

5.8. AC ADAPTER : FSP084-DMAA1 12V/7A 84W

5.9. D-SUB System : AAEON M/N : AEC-6876

5.10. DVI System : Shuttle M/N : XPC

5. AC Adapter Spec

AC Input : 100VAC~240VAC / 47Hz~63Hz

DC Output : 12Vdc Min Load : 0A Full Load : 7A / 84W

6. Test Item

Test Item	Test Condition / Specification		Sanction	
			Measured	Result
6.1. AC Input Current	I/P:115VAC	1.3A	0.96A	PASS
6.2. MAX Inrush Current	I/P:115VAC	A	4.66A	-
	I/P:230VAC	A	6.40A	-
6.3. Input Frequency & Voltage	I/P:90VAC/47HZ	■ON □ OFF	-	PASS
	I/P:90VAC/63HZ	■ON □ OFF	-	PASS
	I/P:264VAC/47HZ	■ON □ OFF	-	PASS
	I/P:264VAC/63HZ	■ON □ OFF	-	PASS
6.4. Switching Test	Switching Time: 0.5 Sec MIN Load / Full Load	@90VAC ■ON □ OFF	-	PASS
	Switching Time: 0.5 Sec MIN Load / Full Load	@115VAC ■ON □ OFF	-	PASS
	Switching Time: 0.5 Sec MIN Load / Full Load	@230VAC ■ON □ OFF	-	PASS
	Switching Time: 0.5 Sec MIN Load / Full Load	@264VAC ■ON □ OFF	-	PASS
6.5. Efficiency	I/P:90VAC O/P:5A	@83%Min	86.21%	PASS
	I/P:115VAC O/P:5A	@83%Min	87.44%	PASS
	I/P:230VAC O/P:5A	@83%Min	87.20%	PASS
	I/P:264VAC O/P:5A	@83%Min	86.76%	PASS
6.6. Line Regulation	I/P:90VAC~264VAC	<%	0.042%	-
6.7. Load Regulation	I/P:115VAC O/P:MIN~FULL LOAD	<%	1.96%	-
	I/P:230VAC O/P:MIN~FULL LOAD	<%	2.045%	-
6.8. Over-Voltage Protection	I/P:230VAC O/P:MIN LOAD	V1 : 17 (MAX)	-	-
6.9. Over-Circuit Protection	O/P: 12V	9.4A(MAX)	8.5A	PASS
6.10. Over-Load Protection	I/P:90VAC O/P:MIN LOAD	135%	121%	PASS
	I/P:115VAC O/P:MIN LOAD	135%	121%	PASS
	I/P:230VAC O/P:MIN LOAD	135%	123%	PASS
	I/P:264VAC O/P:MIN LOAD	135%	124%	PASS
6.11. Short Circuit Protect	I/P:115VAC O/P:MIN LOAD	12V&GND Short	-	PASS
	I/P:230VAC O/P:MIN LOAD	12V&GND Short	-	PASS

6.12. Line Voltage Surge	O/P: FULL LOAD	Surge voltage from 132VAC to 147VAC (0.5sec), back to 132VAC	-	PASS
	O/P: FULL LOAD	Surge voltage from 264VAC to 293VAC (0.5sec), back to 264VAC	-	PASS
6.13. Line Voltage Sag	O/P: FULL LOAD	Sag voltage from 108VAC to 80VAC (0.5sec), back to 108VAC	-	PASS
	O/P: FULL LOAD	Sag voltage from 198VAC to 161VAC (0.5sec), back to 198VAC	-	PASS
6.14. Ripple & Noise	I/P:115VAC O/P:FULL LOAD	$\leq 150\text{mv}$	119.9mv	PASS
	I/P:230VAC O/P:FULL LOAD	$\leq 150\text{mv}$	97.8mv	PASS
6.15. Setup Time	I/P:115VAC O/P:FULL LOAD	3S(MAX)	740ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	518ms	PASS
6.16. Hold up Time	I/P:115VAC O/P:FULL LOAD	20mS(MIN)	35.8ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MIN)	87.6ms	PASS
6.17. Rise Time	I/P:115VAC O/P:FULL LOAD	mS(MAX)	4.85ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	5.87ms	PASS
6.18. Turn on Overshoot	Turn on overshoot shall not exceed 10% over nominal voltages@ 20 % LOAD		-	PASS
	Turn on overshoot shall not exceed 10% over nominal voltages@ 20 % LOAD		-	PASS
6.19. Turn off Undershoot	Turn off undershoot shall not exceed 10% over nominal voltages		-	PASS
	Turn off undershoot shall not exceed 10% over nominal voltages		-	PASS
6.20. Remote ON/OFF	Simulate TTL signal to test this function		-	-
6.21. Power Good Signal	Shall go high level with a delay of100~500ms		-	-
6.22. System Power Consumption Test	No Run Video	I/P:100VAC 0.31A 16.6W	O/P: 12V/1.3A	PASS
	Run Video	I/P:100VAC 0.32A 16.9W	O/P: 12V/1.32A	PASS