

FSP060-DBAB1 of ACD-515D 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
08/16/2011	Jansin Lee	Matthew Chi

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1. Project

FSP060-DBAB1 AC-DC Adapter for ACD-515D

2. Power Manufacturer

FSP

3. Team Member

PM : Chelsea Lee ; RD : Eric Lin

4. Test Equipment

- 4.1. Panel : AUO 15.6" G185XW01 (1366*768)
- 4.2. USB Mouse : Logitech , Model : M-BT85
- 4.3. USB Keyboard : Logitech , Model : Y-BL49
- 4.4. AD Board : S2523BVL Rev : DV
- 4.5. Inverter Board : SAMPO M/N : YIVLAA0730D21
- 4.6. Mini USB contact touch Board : PER-T219 Rev: A0.3
- 4.7. USB Board : PER-T194 REV A0.2
- 4.8. Touch Board : MASTOUCH M/N : MT9C15603EV01
- 4.9. Power Supply : FSP060-DBAB1 AC-DC Power for ACD-515D
- 4.10. DVI&D-SUB System : AEC-6625

5. AC Adapter Spec

AC Input : 90VAC~264VAC / 47Hz~63Hz

DC Output : 12Vdc Min Load : 0A Full Load : 5A / 60W

6. Test Item

Test Item	Test Condition / Specification		Sanction	
			Measured	Result
6.1. AC Input Current	I/P:115VAC	1.7A	1.22A	PASS
6.2. MAX Inrush Current	I/P:115VAC	A	8.44A	-
	I/P:230VAC	A	9.06A	-
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	@%Min	84.188%	-
	I/P:115VAC O/P:5A	@85%Min	85.107%	PASS
	I/P:230VAC O/P:5A	@85%Min	86.695%	PASS
	I/P:264VAC O/P:5A	@%Min	86.496%	-
6.6. Line Regulation	I/P:90VAC~264VAC	<±1%	0.25%	PASS
6.7. Load Regulation	I/P:115VAC O/P:MIN~FULL LOAD	<±5%	4.167%	PASS
	I/P:230VAC O/P:MIN~FULL LOAD	<±5%	4.00%	PASS
6.8. Over-Voltage Protection	I/P:230VAC O/P:MIN LOAD	V1 : 13~18 (MAX)	-	-
6.9. Over-Circuit Protection	O/P: 12V	7.2A(MAX)	6.35A	PASS
6.10. Over-Load Protection	I/P:90VAC O/P:MIN LOAD	144%	124%	PASS
	I/P:115VAC O/P:MIN LOAD	144%	127%	PASS
	I/P:230VAC O/P:MIN LOAD	144%	123%	PASS
	I/P:264VAC O/P:MIN LOAD	144%	125%	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

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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	$\leq 150\text{mv}$	98mv	PASS
	I/P:230VAC O/P:FULL LOAD	$\leq 150\text{mv}$	94mv	PASS
6.15. Setup Time	I/P:115VAC O/P:FULL LOAD	4S(MAX)	862mS	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	840mS	PASS
6.16. Hold up Time	I/P:115VAC O/P:FULL LOAD	8mS(MIN)	18.7mS	PASS
	I/P:230VAC O/P:FULL LOAD	8mS(MIN)	79.3mS	PASS
6.17. Rise Time	I/P:115VAC O/P:FULL LOAD	mS(MAX)	24.2mS	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	24.4mS	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. Power On In Low Temperature	I/P:115VAC (0°C) After 2HR Power On		-	-
6.23. Power On In High Temperature	I/P:115VAC (40 °C)After 2HR Power On		-	-
6.24. Power Consumption Test With AC Adapter	No Run Video(VGA)	I/P:100VAC 0.44A 19.8W	O/P: 12V/1.37A	PASS
	Run Video(VGA)	I/P:100VAC 0.44A 19.9W	O/P: 12V/1.41A	PASS
	No Run Video(DVI)	I/P:100VAC 0.44A 20.1W	O/P: 12V/1.52A	PASS
	Run Video(DVI)	I/P:100VAC 0.46A 20.6W	O/P: 12V/1.61A	PASS