

# FSP060-DBAB1 of ACD-518D Power Electronics Test Report

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

Issue date	Approval	Test Engineer
<b>08/05/2011</b>	<b>Jansin Lee</b>	<b>Sean Hsu</b>

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**1. Project**

FSP060-DBAB1 AC-DC Adapter for ACD-518D

**2. Power Manufacturer**

FSP

**3. Team Member**

PM : Chelsea LEE ; RD : Eric Lin

**4. Test Equipment**

4.1. Panel : AUO 18.5" G185XW01 (1366\*768)

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

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

4.4. Inverter Board : SAMPO M/N : YIVLAA0730D21

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

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

4.7. Touch Board : MASTOUCH M/N : MT9C15603EV01

4.8. Power Supply : FSP060-DBAB1 AC-DC Power for ACD-518D

4.9. 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	8.50A	-
	I/P:230VAC	A	9.12A	-
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	85.110%	PASS
	I/P:230VAC O/P:5A	@85%Min	86.70%	PASS
	I/P:264VAC O/P:5A	@%Min	86.5%	-
6.6. Line Regulation	I/P:90VAC~264VAC	<±1%	0.26%	PASS
6.7. Load Regulation	I/P:115VAC O/P:MIN~FULL LOAD	<±5%	4.17%	PASS
	I/P:230VAC O/P:MIN~FULL LOAD	<±5%	4.15%	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)	6.4A	PASS
6.10. Over-Load Protection	I/P:90VAC O/P:MIN LOAD	144%	125%	PASS
	I/P:115VAC O/P:MIN LOAD	144%	128%	PASS
	I/P:230VAC O/P:MIN LOAD	144%	124%	PASS
	I/P:264VAC O/P:MIN LOAD	144%	126%	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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<b>6.13. Line Voltage Sag</b>	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
<b>6.14. Ripple &amp; Noise</b>	I/P:115VAC O/P:FULL LOAD	$\leq 150\text{mv}$	96mv	PASS
	I/P:230VAC O/P:FULL LOAD	$\leq 150\text{mv}$	98mv	PASS
<b>6.15. Setup Time</b>	I/P:115VAC O/P:FULL LOAD	4S(MAX)	870ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	845ms	PASS
<b>6.16. Hold up Time</b>	I/P:115VAC O/P:FULL LOAD	8mS(MIN)	18.9ms	PASS
	I/P:230VAC O/P:FULL LOAD	8mS(MIN)	80.2ms	PASS
<b>6.17. Rise Time</b>	I/P:115VAC O/P:FULL LOAD	mS(MAX)	24.5ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	24.8ms	PASS
<b>6.18. Turn on Overshoot</b>	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
<b>6.19. Turn off Undershoot</b>	Turn off undershoot shall not exceed 10% over nominal voltages		-	PASS
	Turn off undershoot shall not exceed 10% over nominal voltages		-	PASS
<b>6.20. Remote ON/OFF</b>	Simulate TTL signal to test this function		-	-
<b>6.21. Power Good Signal</b>	Shall go high level with a delay of100~500ms		-	-
<b>6.22. Power On In Low Temperature</b>	I/P:115VAC ( 0℃ ) After 2HR Power On		-	-
<b>6.23. Power On In High Temperature</b>	I/P:115VAC (40 ℃ )After 2HR Power On		-	-
<b>6.24. Power Consumption Test With AC Adapter</b>	No Run Video(VGA)	I/P:100VAC 0.49A 22.3W	O/P: 12V/1.80A	PASS
	Run Video(VGA)	I/P:100VAC 0.50A 22.9W	O/P: 12V/1.87A	PASS
	No Run Video(DVI)	I/P:100VAC 0.49A 22.4W	O/P: 12V/1.81A	PASS
	Run Video(DVI)	I/P:100VAC 0.50A 23.1W	O/P: 12V/1.88A	PASS