

# FSP060-DBAB1 of AGD-317D 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>06/09/2011</b>	<b>Jansin Lee</b>	<b>Sean Hsu</b>

## Table of Contents

1. Project.....	3
2. Power Manufacturer .....	3
3. Team Member .....	3
4. Test Equipment .....	3
5. AC Adapter Spec.....	3
6. Test Item .....	4
6.1. AC Input Current.....	4
6.2. MAX Inrush Current .....	4
6.3. Input Frequency & Voltage .....	4
6.4. Switching Test.....	4
6.5. Efficiency.....	4
6.6. Line Regulation.....	4
6.7. Load Regulation .....	4
6.8. Over-Voltage Protection .....	4
6.9. Over-Circuit Protection .....	4
6.10. Over-Load Protection .....	4
6.11. Short Circuit Protect.....	4
6.12. Line Voltage Surge.....	4
6.13. Line Voltage Sag .....	5
6.14. Ripple & Noise .....	5
6.15. Setup Time .....	5
6.16. Hold up Time.....	5
6.17. Rise Time.....	5
6.18. Turn on Overshoot .....	5
6.19. Turn off Undershoot.....	5
6.20. Remote ON/OFF .....	5
6.21. Power Good Signal.....	5
6.22. Power On In Low Temperature .....	5
6.23. Power On In High Temperature .....	5
6.24. Power Consumption Test With DC Power .....	5
6.25. Power Consumption Test With AC Adapter .....	5

**1. Project**

FSP060-DBAB1 AC-DC Adapter for AGD-317D

**2. Power Manufacturer**

FSP

**3. Team Member**

PM : Maiya Cheng ; RD : Eric Lin

**4. Test Equipment**

- 4.1. Panel : AUO 17" SXGA(1280\*1024) TFT LCD Display
- 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 : QF132V1(A) No:171823
- 4.6. Power Board : PER-P17D Rev: B1.0
- 4.7. Mini USB contact touch Board : PER-T219 Rev: A0.1
- 4.8. Power Supply : FSP060-DBAB1 AC-DC Power for AGD-317D
- 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	8.44A	-
	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

**FSP060-DBAB1 of AGD-317D Power Electronics Test Report**

<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	$\leq 150\text{mv}$	98mv	PASS
	I/P:230VAC O/P:FULL LOAD	$\leq 150\text{mv}$	94mv	PASS
<b>6.15. Setup Time</b>	I/P:115VAC O/P:FULL LOAD	4S(MAX)	862ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	840ms	PASS
<b>6.16. Hold up Time</b>	I/P:115VAC O/P:FULL LOAD	8mS(MIN)	18.7ms	PASS
	I/P:230VAC O/P:FULL LOAD	8mS(MIN)	79.3ms	PASS
<b>6.17. Rise Time</b>	I/P:115VAC O/P:FULL LOAD	mS(MAX)	24.2ms	PASS
	I/P:230VAC O/P:FULL LOAD	mS(MAX)	24.4ms	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°C ) After 2HR Power On			PASS
<b>6.23. Power On In High Temperature</b>	I/P:115VAC ( 50 °C )After 2HR Power On			PASS
<b>6.24. Power Consumption Test With DC Power</b>	No Run Video(VGA)	I/P:9VDC 3.04A 27.4W		PASS
	Run Video(VGA)	I/P:9VDC 3.05A 27.5W		PASS
	No Run Video (DVI)	I/P:9VDC 3.15A 28.3W		PASS
	Run Video (DVI)	I/P:9VDC 3.16A 28.4W		PASS
	No Run Video(VGA)	I/P:30VDC 0.92A 27.5W		PASS
	Run Video (VGA)	I/P:30VDC 0.92A 27.5W		PASS
	No Run Video (DVI)	I/P:30VDC 0.94A 28.1W		PASS
	Run Video (DVI)	I/P:30VDC 0.94A 28.1W		PASS
<b>6.25. Power Consumption Test With AC Adapter</b>	No Run Video(VGA)	I/P:100VAC 0.68A 31.2W	O/P: 12V/1.90A	PASS
	Run Video(VGA)	I/P:100VAC 0.69A 31.2W	O/P: 12V/2.02A	PASS
	No Run Video(DVI)	I/P:100VAC 0.71A 31.5W	O/P: 12V/1.90A	PASS
	Run Video(DVI)	I/P:100VAC 0.71A 31.5W	O/P: 12V/2.00A	PASS