



Embedded Computer Systems

Cable Assembly

Mini DIN-8 Power Adapter

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ORIGINATOR A. W. Kidder	SIGNATURE	DATE
MECHANICAL ENGINEER M. Blattau	SIGNATURE	DATE
MANUFACTURING MANAGER D. Basham	SIGNATURE	DATE
CONFIGURATION MANAGER H. Wilson	SIGNATURE	DATE

1.0 PURPOSE

This document describes how to build a cable that supplies full power to the Graphics Client Plus, Graphics Master and other ADS products with compatible power headers. Voltages include 5V and 12V with 5V power for sleep mode.

This cable can also be used with the 60000-1009A DIN5-to-mini DIN8 adapter. However the adapter does not wire all pins from the mini DIN8 so it is not suitable for high current applications.

2.0 TOOLS REQUIRED

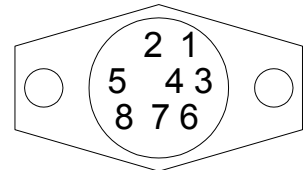
- 2.1 Wire cutter/stripper for 24 AWG wire
- 2.2 Molex crimper #11-01-0185 or equivalent
- 2.3 Label printer

3.0 BILL OF MATERIALS:

ITEM	QTY	ADS PART NO.	DESCRIPTION
1	1 ea.	210070-00053	Mini DIN-8 socket with wire pigtails (RDI #MDR-618-8P-SW)
2	4 ea.	210070-00014	Molex crimp connectors, 22-30AWG (#08-50-0114)
3	1 ea.	210070-00010	Molex 1x6 housing (#22-01-3067)

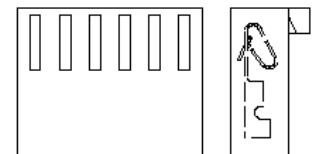
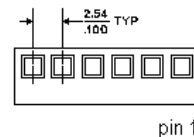
4.0 ASSEMBLY INSTRUCTIONS:

- 4.1 Separate wires of Mini DIN-8 (Item 1) specified in table below. Pins on socket are assigned as shown in View A:
- 4.2 Cut off unused wires at socket.
- 4.3 Strip ends of remaining wires 2-3 mm.
- 4.4 Crimp connectors (Item 2) onto stripped ends. For single-wire crimps, use the "B"(26-30 AWG) position of the crimper. For double wire crimps, use the "A"(22-24 AWG) position.
- 4.5 Slide connectors into Molex housing (Item 3) as follows (note the pin numbering of Molex connector, shown in View B):



View A.
Mini DIN-8
wiring side

Voltage	GC Plus Use	Mini DIN-8 Socket ¹	Molex 1x6 housing ²
+5V	Vcc	1, 2	1
Common	GND	6, 7	2
+12V	backlight, PCMCIA	4	4
+5V	sleep mode (if JP5 set)	3	6



View B.
Molex housing

- 4.6 Identify the cable assembly by part number using permanent adhesive label (e.g. "610110-4009C").

¹ Mini DIN-8 power supplies use pins 1, 2 and 3 for 5V and pins 6, 7 and 8 for GND/Common. However, DIN-5-to-Mini-DIN-8 adapter 60000-1009A doesn't connect pin 2 through, and only pin 6 is a reliable connection for GND/Common.

² Molex does not number the pins on its headers and sockets consistently. Wire the cable per View B.

5.0 REVISION HISTORY

LTR	DESCRIPTION	DATE	APPROVAL
1	Initial draft	10/6/99	ak
	Change sleep mode +5V to use pin 3 of mini DIN-8 instead of 2 and pin 6 instead of 7 for compatibility with 60000-1009A adapter	10/27/99	ak
A	Add clarification about 60000-1009A in intro	2/16/00	ak
B	Add additional conductors for +5V and GND (mini DIN8 pins 2 and 7) to reduce voltage drop across cable in high current applications. Add caveat about use with 60000-1009A. Update for use with other ADS products. Add directions for single- and double-wire crimps.	11/08/02	ak
C	Add drawing of Molex connector and footnote about Molex pin numbering	11/20/02	ak