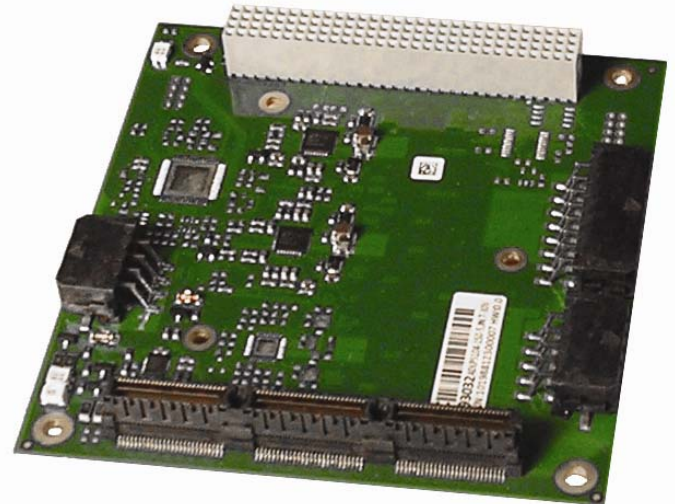




ADLPS104-150, 150W ATX Power Supply

Features

- PCI/104-Express Form Factor (90mm x 96mm)
- Two Variants Available:
 - ADLPS104-150-5: Input: 7-30V, Output: 5V, 5VS, 3.3V
 - ADLPS104-150-12: Input: 14-30V, Output: 5V, 5VS, 3.3V, 12V
- Voltage and Current Specifications (common all variants):
 - Maximum Input Current = 15A
 - Maximum Power = 150W Combined
 - Available Output Current: 5VS/5A, 5V/20A, 3.3V/5A, 12V/10A
- Enhanced EMI Circuitry Designed for IEC 55022 cl. B Emission and EN 55024 Immunity Compliance
- MTBF > 500,000 Hours
- Input Protection:
 - Overcurrent
 - Overvoltage / Undervoltage / Surge
 - Reverse Voltage
- Output Protection:
 - Voltage Out of Range (monitored via PWRGD)
 - Short-circuit
- ATX Compliant Signals Available (PS-ON, PWRGD etc.)
- Temperature Range: -25C to +70C Standard
- Option Available for -40C to +85C with 293034 Heat Spreader



Ordering Information

Item Code	Part #	Description
ADLPS104-150-5	293032	ADLPS104-150-5, 5V, 5VS, 3.3V, ET
ADLPS104-150-12	293033	ADLPS104-150-12, 5V, 5VS, 12V, 3.3V, ET
		*Cables included with each unit
Accessories		
ADLPS104-150-HSP	293034	ADLPS104-150 Heat spreader for -40C to +85C operation; hardware kit included

Description

The ADLPS104-150 power supply board is designed to meet the needs of high-powered Intel® Core™ industrial and embedded motherboards by providing robust ATX voltages (5V, 5VS, 3.3V, 12V) in a stackable PCI/104-Express form factor designed for -40C to +85C operation at 150W. Its small (90mm x 96mm) footprint allows it to fit in many space limited applications. As well, the ADLPS104-150 is tailored to work in conjunction with our ADLQM67PC Sandy Bridge SBC with more than enough headroom for inrush startup currents, and quiescent operation with multiple peripheral cards. Of course, it is also an economical choice for the ADLGS45PC and other lower power platforms.

The ADLPS104-150 features ATX compliant signaling to allow ACPI/APM power management from within compliant operating systems. The ADLPS104-150 is available in two variants, one allowing an input voltage range of 7-30V but providing only the 5V, 5VS, and 3.3V outputs, the other with a narrower input voltage range of 14-30V but providing 5V, 5VS, 3.3V and 12V outputs.

The board is protected against many types of input power anomalies, such as over-currents, voltage deviations and voltage surge. Short bursts of over-current are simply filtered out. Should overvoltage or under voltage situation persist too long, the power supply shuts off. Noise interference is dampened by up to 35dB. The output is protected against reverse voltage and short-circuit. Additionally, the power supply design does not include the use of electrolytic capacitors, thus dramatically increasing the lifespan of the power supply.

Data subject to change without notice.



Cable Connections

ADL Embedded Solutions cable **100-9875** required for use with 293033

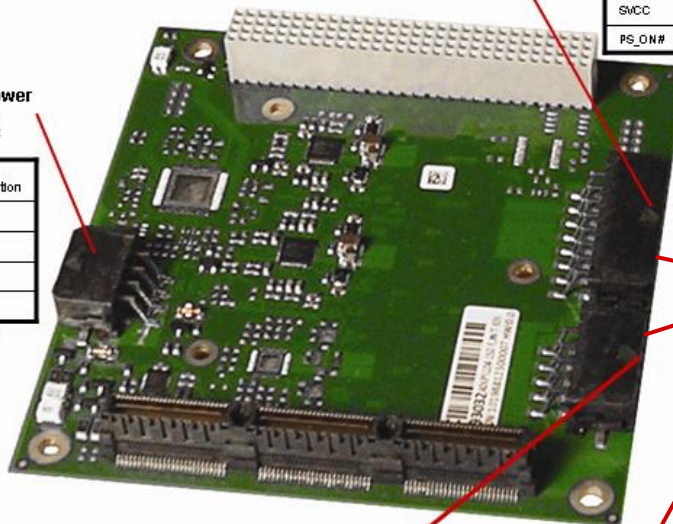
Signal Description	Pin	Pin	Signal Description
12V	1	9	12V
GND	2	10	GND
VCC	3	11	VCC
GND	4	12	GND
3.3V	5	13	3.3V
GND	6	14	GND
SMCC	7	15	PWRGOOD
PS_ON#	8	16	POWERBTN#

P502: Secondary Power Out
 *PS_ON# Must either be connected or grounded to turn on the power outputs

P500 - +7 VDC to +28 VDC Input Power
 PN: 293032: +7 to +28 VDC Input requirement
 PN: 293033: +14 to +28 VDC Input requirement

Signal Description	Pin	Pin	Signal Description
VIN+	1	5	VIN+
VIN+	2	6	VIN+
VIN-	3	7	VIN-
VIN-	4	8	VIN-

ADL Embedded Solutions cable **100-9877**
 For use with 293032, 293033



ADL Embedded Solutions cable **100-9878** required for use 293032 +5VDC output only.

Caution: The use of this cable with 293033 may cause catastrophic damage to attached peripheral cards.

ADL Embedded Solutions cable **100-9874** For use with 293033 (ATX Power mode)

Signal Description	Pin	Pin	Signal Description
12V	1	6	12V
GND	2	7	GND
GND	3	8	SMCC
GND	4	9	GND
VCC	5	10	VCC

P501: Main Power Out

Signal Description	Pin	Pin	Signal Description
VCC	1	6	VCC
GND	2	7	GND
GND	3	8	VCC
GND	4	9	GND
VCC	5	10	VCC

ADL Embedded Solutions cable **100-9876** for use with 293033 (AT power mode)

Data subject to change without notice.