NOVA INTEGRATION SOLUTIONS

MIL/RCOTS Computers, ATR chassis and Printers

½ - Short Conduction-cooled ATR

MODEL 3140

Model 3140 is one of NIS's newer conduction-cooled, front-loading ATR chassis. Manufactured from aluminum alloy #6061-T651, this chassis provides effective thermal conduction management via thick walls and an FEA-modeled outboard finsink design. The result of this advanced cooling technology is the ability to handle up to 250W @ 60°C ambient operating temperature.

As with most of NIS' ATR chassis, Model 3140 is designed to accommodate Eurocard passive backplanes and 3U x 160mm IEEE 1101.1 / .10 plug-in boards. A 3U, 8-slot PICMG- or VITA-style backplane may be installed. The internal wedgelock interface is built with added material to improve thermal conductivity in this critical interface region.

The 3140's default power supply options include 115VAC @ 400Hz or 18-36 VDC, with 250W output supporting 3.3VDC, 5VDC, 12VDC and -12VDC voltages.

Customers may select from numerous D38999 Series-III copper or fiber optic, MIL-STD-26482 or other bulkhead circular types available in the military connector marketplace. For moderate to large unit volume, NIS will design an I / O printed circuit board to reduce cabling complexity and direct labor costs, passing those savings to you, our customer.

- ½-Short Conduction-cooled ATR chassis
- 3U x 160mm Top Loading System
- 8-slot board compartment on 0.8-in. pitch; or, 6 slots on 1-in. pitch
- 6061-T651 aluminum construction
- AC or DC input with 250W output
- Input Transients per MIL-STD-1275/704E
- Shock & Vibration as per MIL-STD-810G; EMC per MIL-STD-461F
- MIL-C-5541E Chemfilm with black hard anodized or painted exterior surface
- ARINC shock tray or hard mounting options
- Custom options or modifications available

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For more information on our wide range of capabilities, products, and services, please visit our web site at: **www.novaintegration.com**

Specifications

Environmental Characteristics

Temperature, operating.....-20°C to +60°C

Temperature, non-operating. .....-55°C to +70°C

Humidity.....10% to 95%, non-condensing

Altitude, operating.....-1,500 ft. to 55,000 ft.

Altitude, non-operating.....-1,500 ft. to 65,000 ft.

Vibration, operating.....designed to meet MIL-STD-810G, Method 514.6, Procedure I - General Vibration, Category 12 - Fixed wing aircraft - jet aircraft, a. Airframe structural response

Vibration, non-operating.....same as operating

Shock, operating.....designed to meet MIL-STD-810G, Method 516.6, Procedure I - Functional Shock

Shock, non-operating.....same as operating

EMI / EMC.....designed to meet MIL-STD-461G, Method CE101, CE102, CS101, RE101, RS101

ESD.....MIL-STD-1686A

Rain.....optional MIL-STD-810G, Method 506.5, Procedure III - Drip

Physical Characteristics

Material.....Aluminum alloy #6061 T651

Finsinks.....Machined outboard design

Size.....6.1 in. W x 7.7 in. H x 10.2 in. L

Weight. .....25 lb. with power supply, fan and backplane

Mounting configurations.....Hard flange mount

Electrical Characteristics

Input Power, standard.....18-32 VDC

Input Power, option.....115 VAC @ 400 Hz

Power Output .....up to 250W

Power Transients.....designed to meet MIL-STD-704E

Ordering Table

95-3140-04086-001	8-slot VME64x backplane; 115 VAC @ 400 Hz input; customer definable I/O connectors; ARINC shock tray mounting (tray sold separately)
95-3140-06086-001	8-slot CPCI 2.1R3.0 backplane; 115 VAC @ 400 Hz input; customer definable I/O connectors; ARINC shock tray mounting (tray sold separately)
95-3140-05056-001	6-slot OpenVPX (VITA-65) mesh backplane; 115 VAC @ 400 Hz input; customer definable I/O connectors; ARINC shock tray mounting (tray sold separately)

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