# ATCA CARRIER-GRADE 13U SYSTEM

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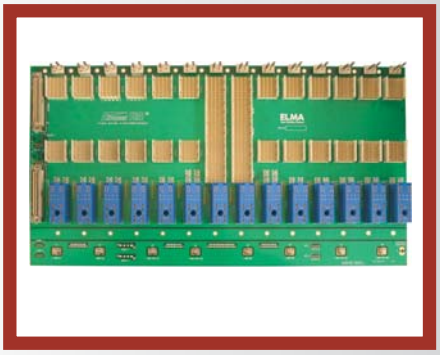
## Features

- 14 slot dual star backplane with integrated dual shelf manager connectors
- Dual 2nd Gen shelf managers in card cage slot 0 for easy access
- Cooling scheme engineered after extensive thermal simulations ensures even distribution of air over board surface per ATCA spec
- Capable of cooling over 200 watts per slot with up to 40 CFM per slot in front card cage and 6-10 CFM over RTMs
- 3 x individually removable fan trays with 2 x 120mm 48V fans each
- High speed Fans rated from 250 to 420 CFM per fan with PWM control
- NEBS compliant air filter above fans ensures even air distribution
- Honeycomb filter located below fans maximizes air flow intake
- Rear I²C enabled dual 50A power entry modules per segment (A and B)
- Optional PEMs with integrated circuit breaker
- RoHS compliant steel construction with black finish
- All FRUs (fan trays, PEMs) with Indicator LEDs
- Front and rear cable management brackets

The 2nd Gen 19" rackmount vertical ATCA chassis is designed for carrier-grade applications. The 13U chassis features a 14-slot dual star or mesh backplane. The unit is fully pluggable, designed for NEBS compliance, and radial or bussed IPMB shelf management. The chassis has been optimized via thermal simulation studies.



## Dual Star Backplane

- 14-slot Dual Star Backplane
- PICMG 3.0 compliant
- Dual fan trays, shelf manager and power entry modules
- Connections for IPM Sentry and other shelf managers
- Optimized performance through signal integrity studies

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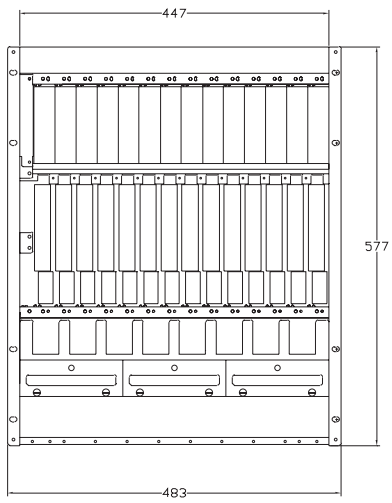
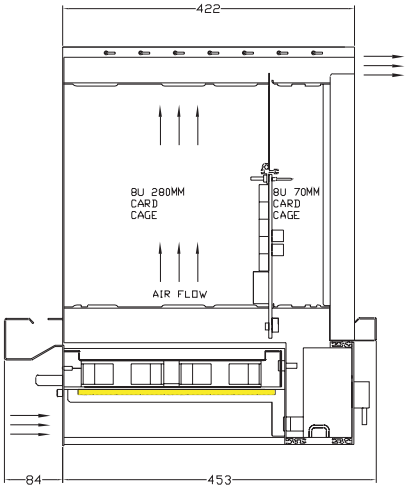
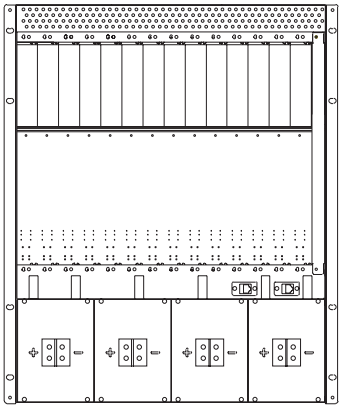
## Line Drawings



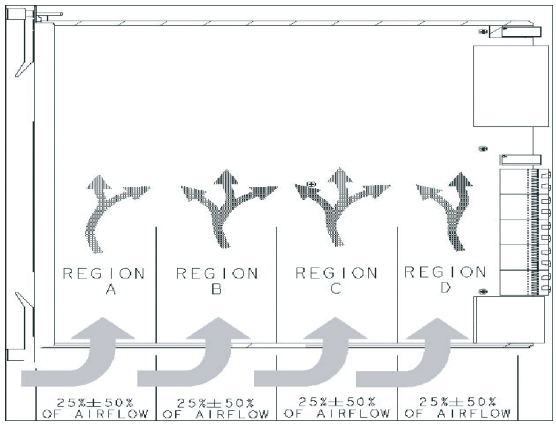

FRONT VIEW




SIDE VIEW



REAR VIEW




The ATCA specification recommends that each region shown on the left receives from 20%-30% of the total airflow in each slot

## Order Information

| Description | Model Number |
|---|---|
| ATCA Carrier-Grade 13U System | 11A14FGXD8Y4VMXX |
| • 13U H x 84HP W x 198mm D<br>• 14 slot Dual Star backplane<br>• Dual 48VDC<br>• Assembled and wired | |
| 14-slot, Dual Star Backplane | CAE017819 |
| • Complies to PICMG MicroTCA.0 Rev. 1.0<br>• Compression style connector<br>• 3 x fan tray connector, 4 x PEM connectors, 8 x LM75 thermal sensor connectors<br>• Slot-to-slot aggregate bandwidth of 5,000 Mbytes/sec<br>• 18-layer board, FR-4 or equivalent<br>• Provision for 2 x 2nd generation shelf manager | |

# ATCA CARRIER-GRADE 13U SYSTEM - Custom Configurations

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**11A** ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7 8 9 10 11 12 13

**1,2) Num. of Slots BP**
00-21: Single BP AA-YY: Split
• 14 = 14 slot

**3) BP Bare board**
• E = 1 x SM
• F = 2 x SM (Bussed IPMB)
• G = 2 x SM (Radial IPMB)
• Z = Custom

**4) Fabric Architecture**
• F = Star
• G = Dual Star
• H = Mesh
• J = Replicated Mesh
• Z = Custom

**5) Cooling**
• C = 3 x Tray (Plug in)

**6) Height**
• D = 13U

**7) Width**
• 8 = 84T

**8) Rear I/O**
• N = No
• Y = Yes

**9) Depth**
• 3 = 300mm-399mm

**10) Card Orientation**
• V = Vertical
• H = Horizontal

**11) PSU Input**
• C = 90-230VAC (Fixed)
• G = 90-230VAC (Plug In)
• H = 48VDC
• M = Dual 48VDC
• P = 90-230VAC (2 x HS, N+1)
• Q = 90-230VAC( 3 x HS, N+1)
• X = No PSU

**12) PSU Output (Note: Not all PSU combinations available)**
• 4 = 400-599 watt
• 6 = 600-799 watt
• 8 = 800-999 watt
• A = 1000-1199 watt
• B = 1200 watt
• C = 1600-1799 watt
• D = 1800-1999 watt
• E = 2000-2199 watt
• F = 2200-2399 watt
• G = 2400-2599 watt
• H = 2600-2799 watt
• X = Not installed

**13) Shelf Manager (Installed)**
• S = 1 x Plug in
• D = 2 x Plug in
• X = Not installed