

## TYPE 11, MicroTCA 4U SYSTEM PLATFORM



### FEATURES

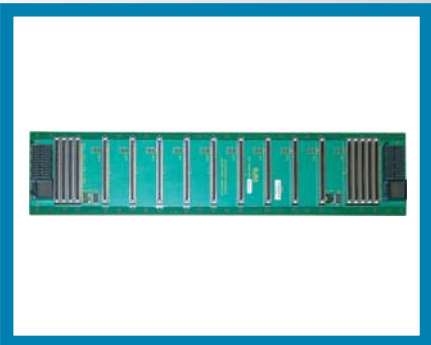
- 19" rack mount, according to PICMG MicroTCA.0 Rev. 1.0
- Backplane in single module x full size standard, other sizes available
- Single Star or Dual Star backplanes standard
- Modular extrusion-based solutions
- Front air intake, rear air exhaust
- Fixed fan trays in push configuration
- Removable air filter
- High EMC shielding
- Optional locking bars to secure modules in chassis
- Optional cable management tray
- Optimized via thermal simulation studies
- Customized versions available

Elma's unique modular MicroTCA solution allows a wide range of design options. The Elma solution is extrusion-based, with modular card guides allowing various slot counts, card heights, and component configurations. This greatly reduces the costs, lead-time, and risk of tailoring a configuration to a customer's specific needs. The Elma modular design also keeps prototyping costs low. When a project moves to higher volumes, Elma can switch from extrusions to stamped sheet metal. Thermal simulation reports are available under NDA, contact Elma for details.

MicroTCA systems will support up to 58 single width, compact-size AdvancedMC modules in a 19" EIA rack or an assortment of different size modules. AdvancedMC modules are targeted for such modular applications as storage arrays, firewalls, blade servers, and even home entertainment centers. Each module may dissipate between 20 and 60 watts each and the platform management scheme is designed to support applications from 99.99% to 99.999% availability.

### MicroTCA BACKPLANE

- Complies to PICMG MicroTCA.0 Rev. 1.0
- Compression-mount style connectors standard. Press-fit or surface-mount are optional
- Connectors for fan units and power input
- Slot-to-slot aggregate bandwidth of 5,000 Mbytes/sec
- Star Backplane
  - 12 AMC, 1 MCH, 1 power module (full size)
- Dual Star Backplane
  - 10 AMC, 2 MCH, 2 power modules (full size)
- Other versions available in various configurations
- Standard shelf management - MicroTCA Carrier Hub (MCH)
- Optimized via signal integrity studies

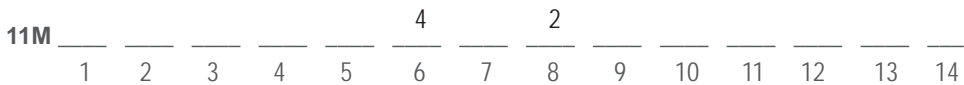


# TYPE 11, MicroTCA 4U SYSTEM PLATFORM

## Order Information

Description	Model Number
Type 11M, MicroTCA 19" rackmount chassis	11M12S6K472VHXXXP
<ul style="list-style-type: none"><li>• 4U H x 87HP W x 198mm D</li><li>• Holds 14, single-width x full size (6HP) modules</li><li>• 14 slot Star backplane; 12 AMC, 1 x MCH, 1 x PSU</li><li>• Fixed fan trays in Push configuration</li><li>• Removable air filter</li><li>• Accepts 48VDC input PSU, full size (not included)</li><li>• Accepts 1 x MCH (not included)</li><li>• Assembled and wired</li></ul>	
Type 11M, MicroTCA 19" rackmount chassis	11M10S6K472VH4XXP
<ul style="list-style-type: none"><li>• 4U H x 87HP W x 198mm D</li><li>• Holds 14, single-width x full size (6HP) modules</li><li>• 14 slot Dual Star backplane; 10 AMC, 2 x MCH, 2 x PSU</li><li>• Fixed fan trays in Push configuration</li><li>• Removable air filter</li><li>• 48VDC input PSU, in single width x full size (included)</li><li>• Accepts 2 x MCH's (not included)</li><li>• Assembled and wired</li></ul>	
14-slot, Star Backplane	69-14SK-12-1-1
<ul style="list-style-type: none"><li>• Complies to PICMG MicroTCA.0 Rev. 1.0</li><li>• Press-fit style connector</li><li>• Connectors for fan units and power input</li><li>• Slot-to-slot aggregate bandwidth of 5,000 Mbytes/sec</li><li>• Star backplane - 12 AMC, 1 MCH, 1 power modules (full size)</li><li>• 16-layer board, FR-4 or equivalent</li><li>• Standard shelf management - MicroTCA Carrier Hub (MCH)</li></ul>	
14-slot, Dual Star Backplane	69-12DL-10-2-2
<ul style="list-style-type: none"><li>• Complies to PICMG MicroTCA.0 Rev. 1.0</li><li>• Compression style connector</li><li>• Connectors for fan units and power input</li><li>• Slot-to-slot aggregate bandwidth of 5,000 Mbytes/sec</li><li>• Dual star backplane standard - 10 AMC, 2 MCH, 2 power modules (full size)</li><li>• 26-layer board, FR-4 or equivalent</li><li>• Standard shelf management - MicroTCA Carrier Hub (MCH)</li></ul>	

# TYPE 1 1, MicroTCA 4U SYSTEM PLATFORM - Custom Configurations



**1,2) Num. of AMC Slots**  
• Examp.: 01 = 1, 10 = 10

**3) Module Width**  
• S = Single Module  
• D = Double Module  
• Z = Combination  
• X = Not installed

**4) Module Height (Pitch)**  
• 3 = Compact (3 HP)  
• 4 = Mid-size (4 HP)  
• 6 = Full-size (6 HP)  
• Z = Combination

**5) Fabric Topology**  
• H = Mesh  
• J = Redundant Mesh  
• K = Single Star  
• L = Dual Star  
• N = Non Redundant  
• X = Not installed  
• Z = Custom

**6) Height**  
• 4 = 4U

**7) Width**  
• 8 = 84T  
• 7 = 87T

**8) Depth**  
• 2 = 200mm-299mm

**9) Card Orientation**  
• V = Vertical (Default STD)  
• H = Horizontal or custom

**10) PSU Input**  
• C = 90-230VAC (Fixed)  
• H = 48VDC plug in  
• M = Dual 48VDC plug in  
• P = 90-230VAC (2 x HS, N+1)  
• X = No PSU  
• Y = 24 V Plug in  
• Z = Dual 24V plug in

**11) PSU Output**  
(Note: Not all PSU combinations available)  
• 2 = 200-299 watt  
• 3 = 300-399 watt  
• 4 = 400-499 watt  
• 5 = 500-599 watt  
• X = Not installed

**12) MCH**  
• S = 1 x Plug in  
• D = 2 x Plug in  
• X = Not installed

**13) JSM**  
• Y = Installed  
• X = Not installed

**13) Cooling**  
• P = Push cooling  
• X = Not installed

\* Note 1: 1x MCH supports 12 AMC slots

\*\* Note 2: All slot counts are based on total number of available AMC slots (single, double or single stacked).