

## TYPE 11, MicroTCA 8U SYSTEM PLATFORM



### FEATURES

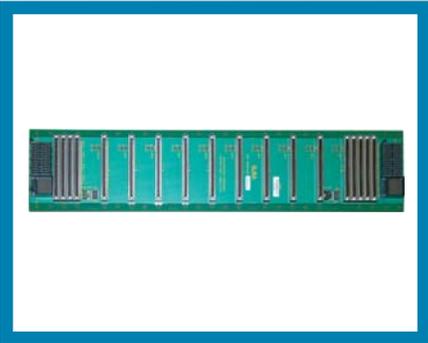
- 19" rack mount, according to PICMG MicroTCA.0 Rev. 1.0
- Backplane for full size modules standard, other sizes available
- Modular extrusion-based solution
- Front air intake, rear air exhaust
- Fan trays pluggable in a push/pull configuration
- Removable air filter
- High EMC shielding
- Optional locking bars to secure modules in shelf
- 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 card guide support plate allows the same chassis to contain both single width (75mm high) or double width (150mm high) modules. 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.

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 99.999% to 99.9999% availability.

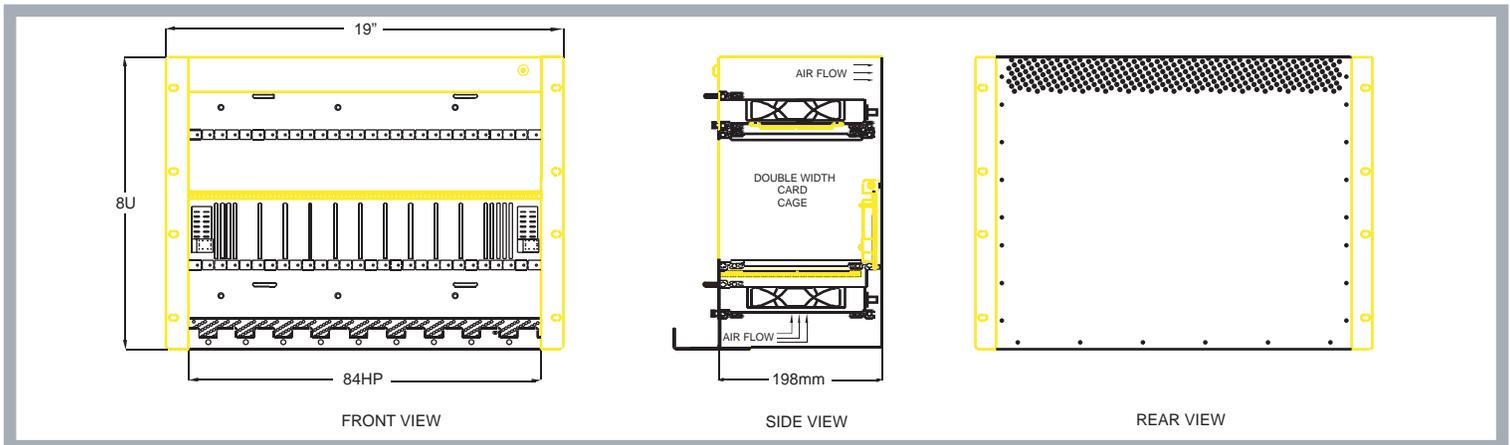
### MicroTCA DUAL STAR BACKPLANE

- Complies to PICMG MicroTCA.0 Rev. 1.0
- Compression-mount style connectors are standard. Press-fit or surface-mount are optional
- Connectors for cooling units
- Slot-to-slot aggregate bandwidth of 5,000 Mbytes/sec
- 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



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## Line Drawings



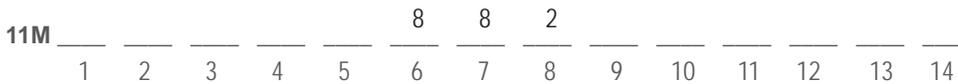
## Environmental Specifications

	Operating	Storage/Transit
Temperature:	0°C to +50°C	-20°C to +70°C
Altitude:	6000 ft. (1,829m)	50,000 ft. (15,240m)
Humidity:	5% to 95% Non condensing	5% to 95% Non condensing
Shock:	10 G's @ 11ms	15 G's @ 11ms (per ASTM 0775)
Vibration:	1.0 G's @ 10 to 330 Hz	1.2 G's @ 5 to 330 Hz
Agencies:	Designed to meet UL 1950, FCC, A, B, CE	

## Order Information

Description	Model Number
Type 11M, MicroTCA 19" rackmount chassis	11M10D6L882VMXXXR
<ul style="list-style-type: none"> <li>• 8U H x 84HP W x 198mm D</li> <li>• Holds 14, double x full size (6HP) modules</li> <li>• Dual Star backplane; 10 AMC, 2 x MCH, 2 x PSU</li> <li>• 6 x pluggable fan trays in push/pull configuration</li> <li>• Removable air filter</li> <li>• Accepts 2 x 48VDC input PSU, in double x full size power modules (not included)</li> <li>• Accepts 2 x MCH's (not included)</li> <li>• Assembled and wired</li> </ul>	
Type 11M, MicroTCA 19" rackmount chassis	11M10D6L882VM4XXR
<ul style="list-style-type: none"> <li>• 8U H x 84HP W x 198mm D</li> <li>• Holds 14, double x full size (6HP) modules</li> <li>• Dual Star backplane; 10 AMC, 2 x MCH, 2 x PSU</li> <li>• 6 x pluggable fan trays in push/pull configuration</li> <li>• Removable air filter</li> <li>• Accepts 2 x 48VDC input PSU, in double x full size power modules (included)</li> <li>• Accepts 2 x MCH's (not included)</li> <li>• Assembled and wired</li> </ul>	
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 cooling units</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 8U 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 = 3 HP (Half)  
• 4 = 4 HP (Mid)  
• 6 = 6 HP (Full)  
• Z = Combination

**5) Fabric Topology**  
• K = Single Star  
• L = Dual Star  
• X = Not installed  
• Z = Custom

**6) Height**  
• 8 = 8U

**7) Width**  
• 8 = 84T

**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

**14) Cooling**  
• P = Push cooling  
• R = Redundant Push-Pull  
• 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).