



**Product Brief**  
**TPM-100 Processor Card**

**Rev 0.5**

## Summary:

The JumpGen Systems TPM-100 Tiler 64-core Processor Card is a high-performance processor AdvancedMC™ (PrAMC) card designed for use in ATCA or MicroTCA systems. The TPM-100 is compliant with PICMG AMC.0 Revision 2.0 Mid-Size or Full-Size form factor standards. Featuring the Tiler® TILEPro64™ processor offering 64 general purpose cores running at 700MHz and over 20Gbps of full-duplex I/O, the TPM-100 has 2GB of 4-channel 64-bit wide DDR2 memory running at 800 MHz.

The TPM-100 is suitable for general processing, network security, network infrastructure, packet inspection, digital multimedia, video processing, signal processing and wireless infrastructure applications.

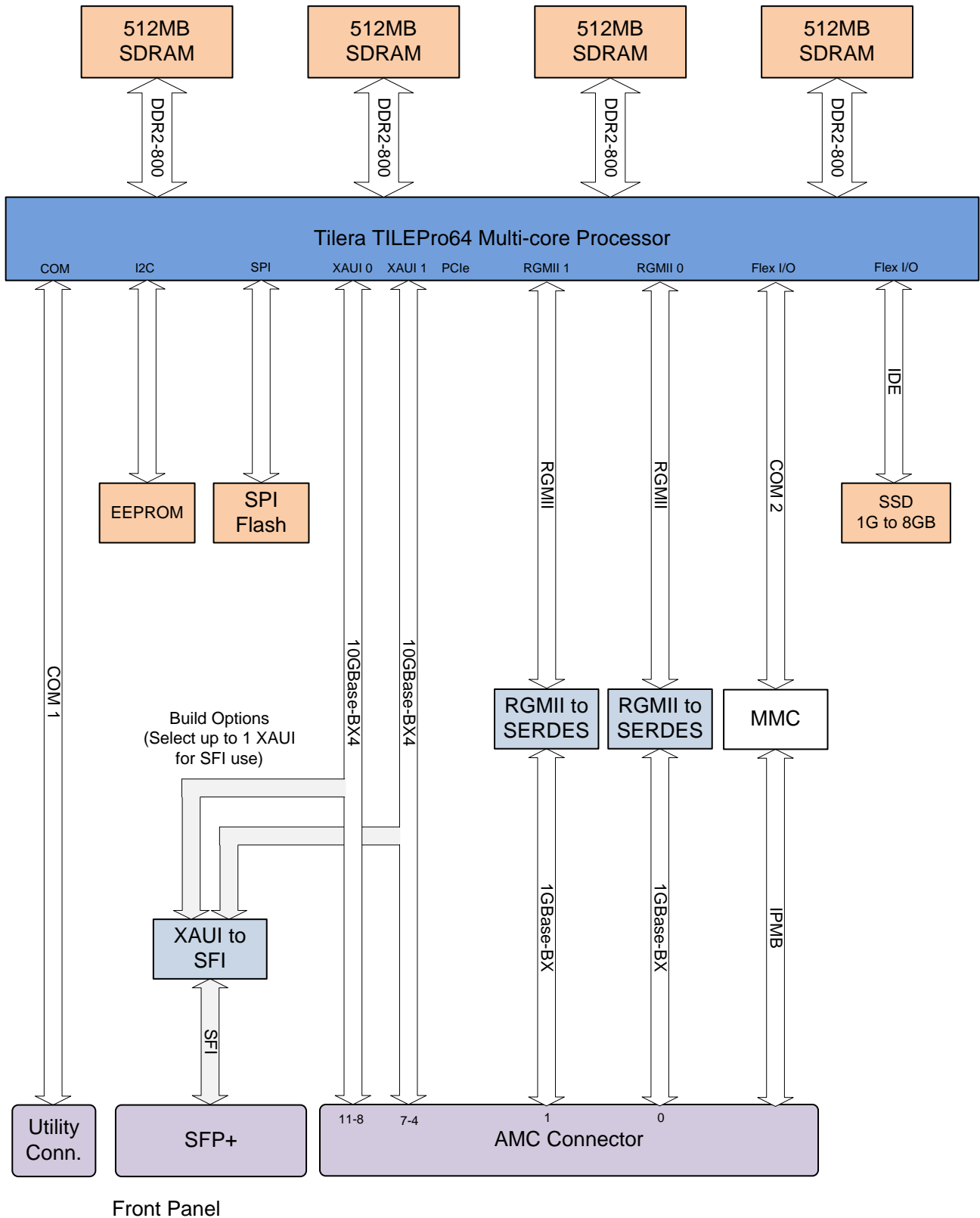
The TPM-100 is available in three I/O configuration options:

1. AMC.2 Type 6 Dual 10GigE to the backplane
2. TILEPro64 Port 1 to SFP+ on the front panel, Port 0 to backplane lanes 8-11
3. TILEPro64 Port 0 to SFP+ on the front panel, Port 1 to backplane lanes 4-7

## Features:

Central Processing Units (CPUs)	<p>Tiler TILEPro64 processor</p> <ul style="list-style-type: none"> <li>• 64 general purpose RISC-based cores running at 700MHz</li> <li>• 2GB of DDR2 memory running at 800MHz</li> <li>• 2 10Gbps XAUI interfaces</li> <li>• 2 1Gbps interfaces</li> <li>• SMP LINUX, Zero Overhead LINUX (ZOL), Bare Metal Environment (BME), and has a standard C/C++ tools set</li> </ul>
I/O Capabilities	<p>Dual 10G Connections, configurable as:</p> <ul style="list-style-type: none"> <li>• AMC.2 Type 6, Dual 10GigE (Lanes 4-7, 8-11) or</li> <li>• Front-panel SFP+ module bay (either TILEPro64 XAUI interface)</li> </ul> <p>AMC.2 Dual 1000Base-BX Ports configured as Type E2 (Lanes 0, 1)</p> <p>Serial Protocols</p> <ul style="list-style-type: none"> <li>• RS-232 on Front Panel (RJ-12)</li> </ul>
Mass Storage	1-8 GB Solid State Drive (SSD)
Firmware Boot Options	<p>Network boot (GigE or 10GigE ports)</p> <p>SSD boot</p>
Mechanical	Standard AMC Full-Size or Mid-Size form factor
Environmental	<p>Operating temperature range: 0 to 55 °C</p> <p>Humidity: 0 to 95% (non-condensing)</p> <p>Typical Power &lt; 40W, Worst-case Power consumption: 48W</p>

# Block Diagram:



# Major Component Placement:

