

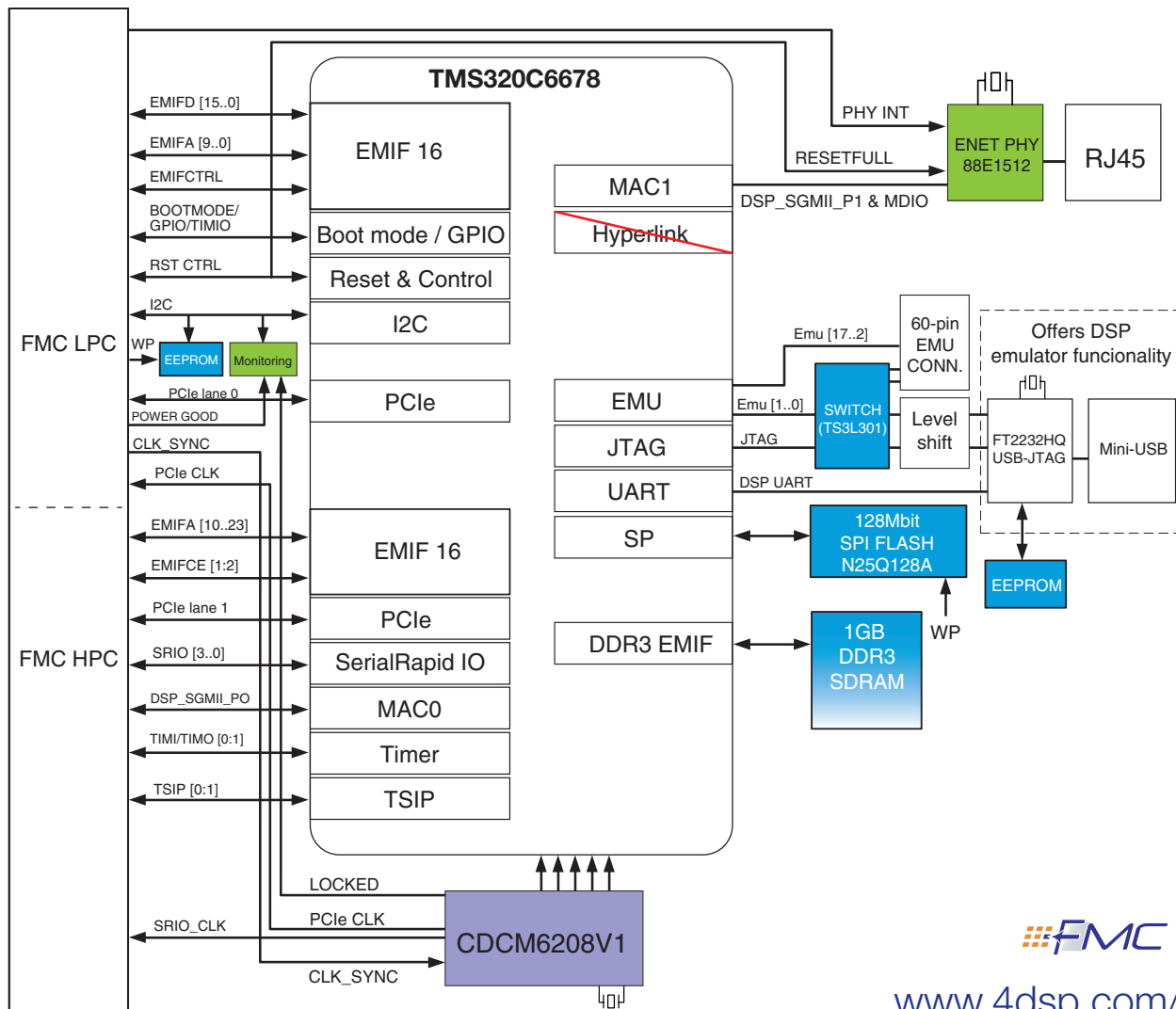
### FMC667

# C6678 Floating-Point DSP FMC

#### Description

The FMC667 is a Digital Signal Processor FMC daughter card based on the Texas Instruments TMS320C6678 device. The FMC667 daughter card is mechanically and electrically compliant with the FMC standard (ANSI/VITA 57.1), and can be used in a conduction cooled environment. This FMC is equipped with power supply and temperature monitoring and offers several power-down modes to switch off unused functions and peripheral interfaces. Several Gigabit differential pairs from the FMC connector are used to

implement a PCIe and Serial Rapid IO interface between the FMC and the carrier. Many other digital I/O interfaces are also made available to the FMC carrier. Because of the use of level translators between the DSP and the FMC connector the FMC667 can fully operate on any VITA 57.1 compliant carrier. A 1GB DDR3 SDRAM on-board bank directly connects to the DSP thus providing the FMC667 with the memory resources required for demanding signal processing applications.



## TMS320C6678

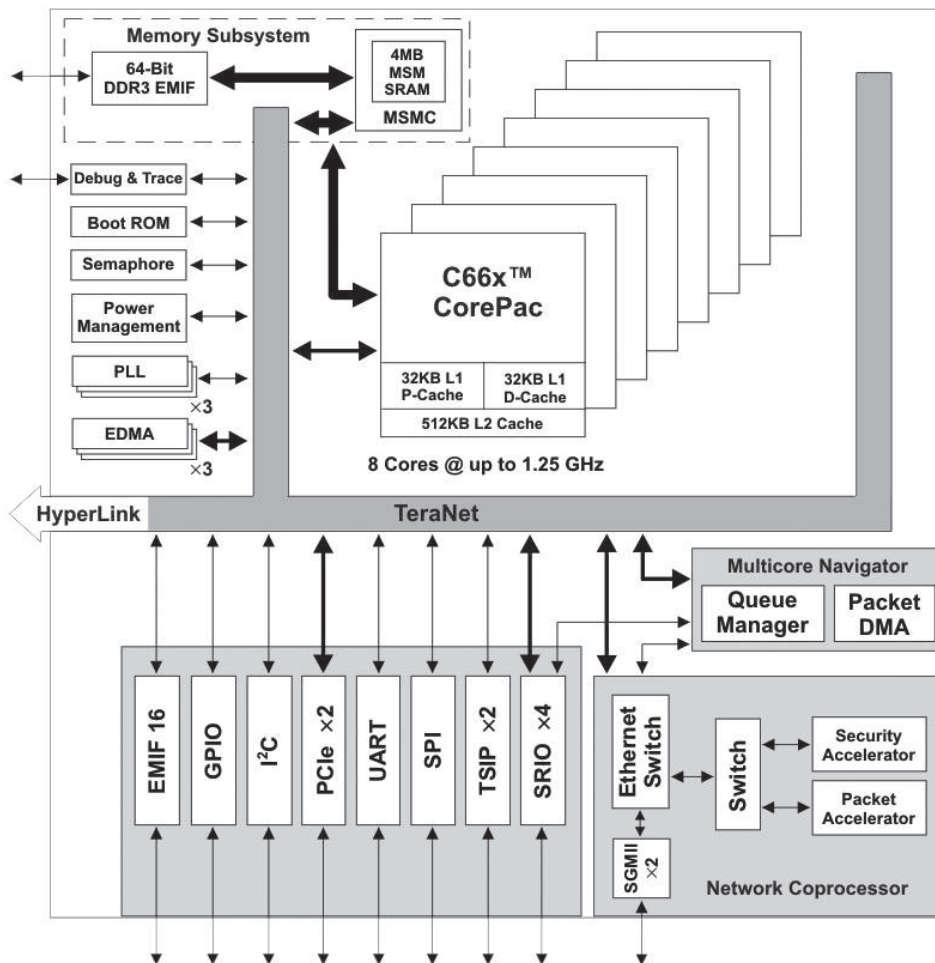
The TMS320C6678 Multicore Fixed and Floating Point Digital Signal Processor is based on TI's KeyStone multicore architecture. Integrated with eight C66x CorePac DSPs, each core runs at 1.0 to 1.25 GHz enabling up to 10 GHz. The device supports high-performance signal processing applications such as mission critical, medical imaging, test, and automation.

## Support

- User manual
- For support, please visit our support forum
- Stellar IP is available for this product. A simple way to design FPGA firmware with automated code and bitstream generation.
- Can be used on any VITA 57.1 compliant carrier card
- User Manual
- Reference designs available for multiple FPGA carriers

## Features

- 1.25GHz, 8-core, TMS320C6678 DSP
- Fully conduction cooled compliant
- VITA 57.1-2010 compliant
- 1.8V to 3.3V VADJ operation
- Onboard 1024MB (1GB) DDR3 memory
- Gigabit Ethernet
- UART
- HPC (High-Pin Count) 400-pin connector, LPC compatible
- MIL-I-46058c compliant (optional)
- Non-volatile memory for DSP software booting (flash)



Talk to us about your algorithmic requirements, 4DSP is a full-service firmware and software development house. We are a specialist at high performance FFT and Video Processing. Check with us, we may have IP Cores that meet requirements for your application, right off the shelf.