

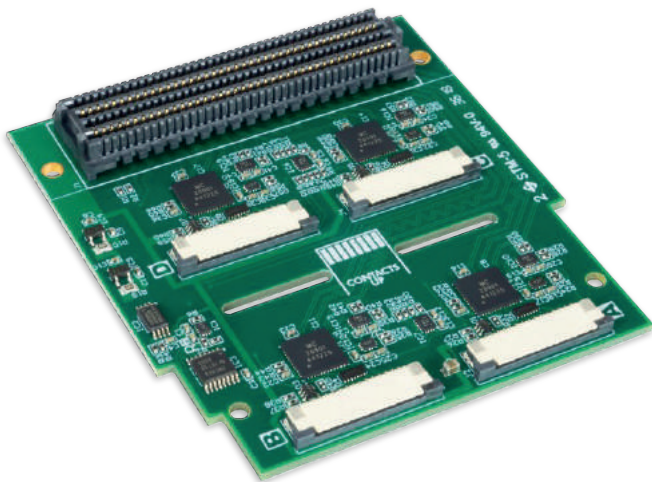
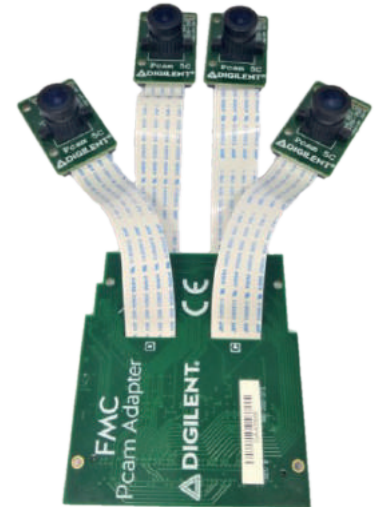
## HD Video Processing Ecosystem

### FMC Pcam Adapter

The FMC Pcam Adapter is an FMC mezzanine (peripheral) board allowing interfacing up to four Pcam camera modules to field-programmable gate array (FPGA) based systems. It extends the capabilities of development platforms to enable multi-camera video applications.

There are two variants available: Dual and Quad, based on the number of Pcam connectors and related circuitry. Dual makes connecting two Pcam 5C (or similar) possible, with Quad increasing that to four.

The adapter board's main purpose is to translate the MIPI D-PHY input to LVDS/LVCMOS outputs that are supported on most FPGAs. It also translates the 3.3V control signals of the Pcam to the adjustable I/O voltage powering the FMC bank, VADJ. Therefore, compatibility is extended to boards with FPGAs that have only low-voltage I/O banks ( $\leq 1.8V$ ).



- ✓ Two/Four Pcam system-side connectors
- ✓ Level translators from MIPI D-PHY to LVDS and LVCMOS
- ✓ Male FMC LPC connector for digital signals
- ✓ Compatible with a wide range of VADJ voltages (1.8V – 3.3V)

The Pcam ports are system-side, 15-pin, bottom-load, top-contact FFC connectors. Pcam modules are connected using the flexible-foil cable provided with them. The correct cable orientation is with the contact pads facing away from the board.

