![Bitec logo] **DSP SOLUTIONS FOR INDUSTRY & RESEARCH**
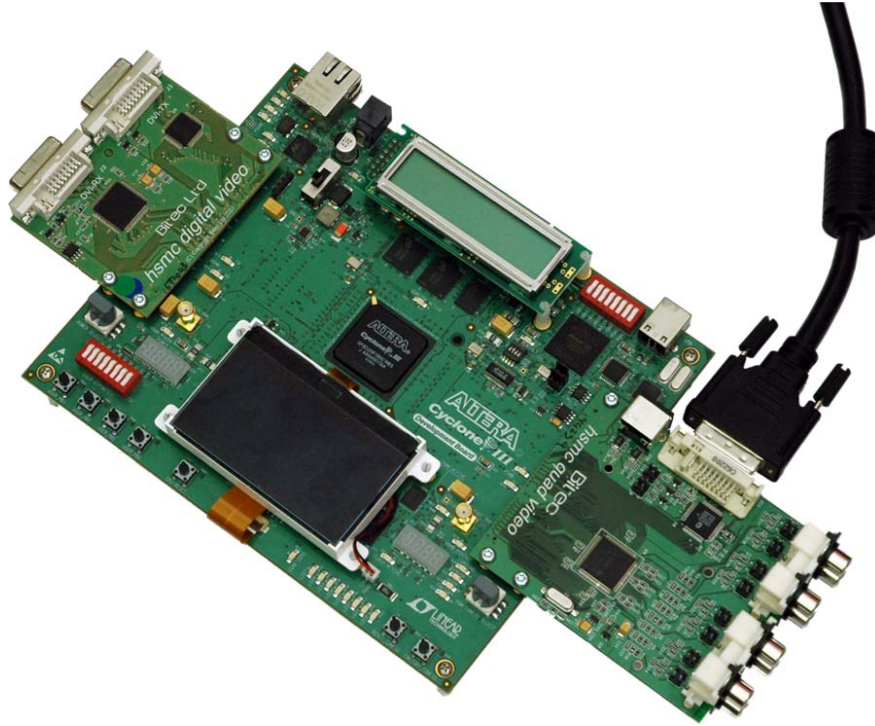
Product Brief:

Cyclone III Video Processing Development Kit

The Cyclone III is an ideal video processing platform given the large number of multipliers, low power and M9K memory blocks. The Bitec Video Development Kit provides a cost effective, integrated solution for developers wishing to utilise the Cyclone III device for video application development. Based on the Altera Cyclone Development Kit, the Video Development Kit enables designs to interface to a wide variety of video devices via two High-Speed Mezzanine Connector (HSMC) daughter cards.

The kit comprises of

- o Altera Cyclone III EP3C120F780 Development base kit (visit http://www.altera.com/products/devkits/altera/kit-cyc3.html)
- o A Bitec quad video daughter card (visit www.bitec.ltd.uk/hsmc_quad_video.html)
- o Bitec HSMC DVI card (visit www.bitec.ltd.uk/hsmc_dvi.html).
- o A CDROM with various IP CORES and reference designs
- o A DVI cable is also included.

Features

- EP3C120 development base board
  - Cyclone® III EP3C120F780 FPGA
  - 256-Mb dual-channel DDR2 SDRAM, 8-Mb Sync-SRAM, 64 M flash
  - 10/100/1000 Ethernet
  - USB 2.0
  - LCD display

- Bitec HSMC DVI input/output daughter card
  - Digital Visual Interface Compliant (DVI 1.0)
  - Supports resolutions from VGA to UXGA (1600x1200 including 1080p)
  - EDID data reading/writing
  - Monitor detection through Hot-Plug

- Bitec HSMC Quad Video daughter card
  - Accepts NTSC (M, 4.43), PAL (B, D, G, H, I, M, N), and SECAM (B, D, G, K, K1, L)
  - Support ITU-R BT.601
  - High-Speed 9-Bit ADC on each channel
  - Two Composite Inputs or One S-video Input (for Each Channel)
  - Total of 8 independent composite input streams.
  - Brightness, Contrast, Saturation, Hue and Sharpness Control Through
  - Four Independent Polymorphic Scalers
  - Standard Programmable Video Input Format
  - ITU-R BT.656, 8-Bit 4:2:2 With Embedded/ Discrete Syncs
  - DVI Transmitter up to 165M pixels/second (1600x1200, 1080i, etc)
  - TV output supporting graphics resolutions up to 1024 x768 pixels
  - Support for all NTSC and PAL formats on video output
  - Provides CVBS, S-Video and SCART (RGB) outputs

For more information http://www.bitec.ltd.uk/