



Future Technology Devices International Ltd.

Morph-IC-II

Datasheet

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Morph-IC-II is a compact, yet powerful FPGA module which is capable of synthesising LSI (Large Scale Integration) designs using the embedded Altera Cyclone-II FPGA. Communication between the FPGA and a PC is carried out via the FTDI FT2232H, a USB 2.0 Hi-Speed (480Mbit/s) USB bridge. Sub-100ms FPGA programming/re-programming makes Morph-IC-II ideal for applications which require users to reconfigure hardware functionality 'on-the-fly' by downloading new software over USB : "morphing" the hardware.

Morph-IC-II has increased in capability and processing power from a previous FTDI FPGA module called MorphIC-1K.

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1.1 Applications

Possible applications:

- ASIC prototyping using USB connectivity to FPGA.
- Providing a fast and easy alternative to ASIC solutions for low to medium volumes of product.
- Academic FPGA design exercise – ideal for learning and experimenting with HDL (Hardware Design Language)
- Digital signal processing
- Audio/Video
- Cryptography

