

DECA MAX[®]10 FPGA Evaluation Kit

DECA is a full-featured hardware platform based on the Altera MAX[®] 10 FPGA. The DECA Evaluation kit includes many different features and interfaces including a BeagleBone compatible header to tap into a large infrastructure taking I/O expansion to the ultimate level. Coupled with multiple sensors, LEDs, pushbuttons and an on-board USB Blaster™ II, the DECA Evaluation platform takes integration to the next level.

Board Highlights

- Features Altera MAX 10 FPGA with ADC block, temperature sense diode, onchip-RAM, user flash memory and non-volatile self-configuration
- Powered with Altera Enpirion[®] PowerSoC DC-DC converters and LDOs
- Features TI's new relative humidity sensor and temperature sensor
- Allows for further expansion through a Molex BeagleBone compatible header
- Includes a three-in-one Gesture/ Proximity/Ambient light sensor from SiLabs
- Cypress CapSense[®] MBR3 (Mechanical Button Replacement)
- Micron 4Gb DDR3 SDRAM
- 10/100 Ethernet
- MIPI CSI-2 camera interface
- On-board USB Blaster™ II

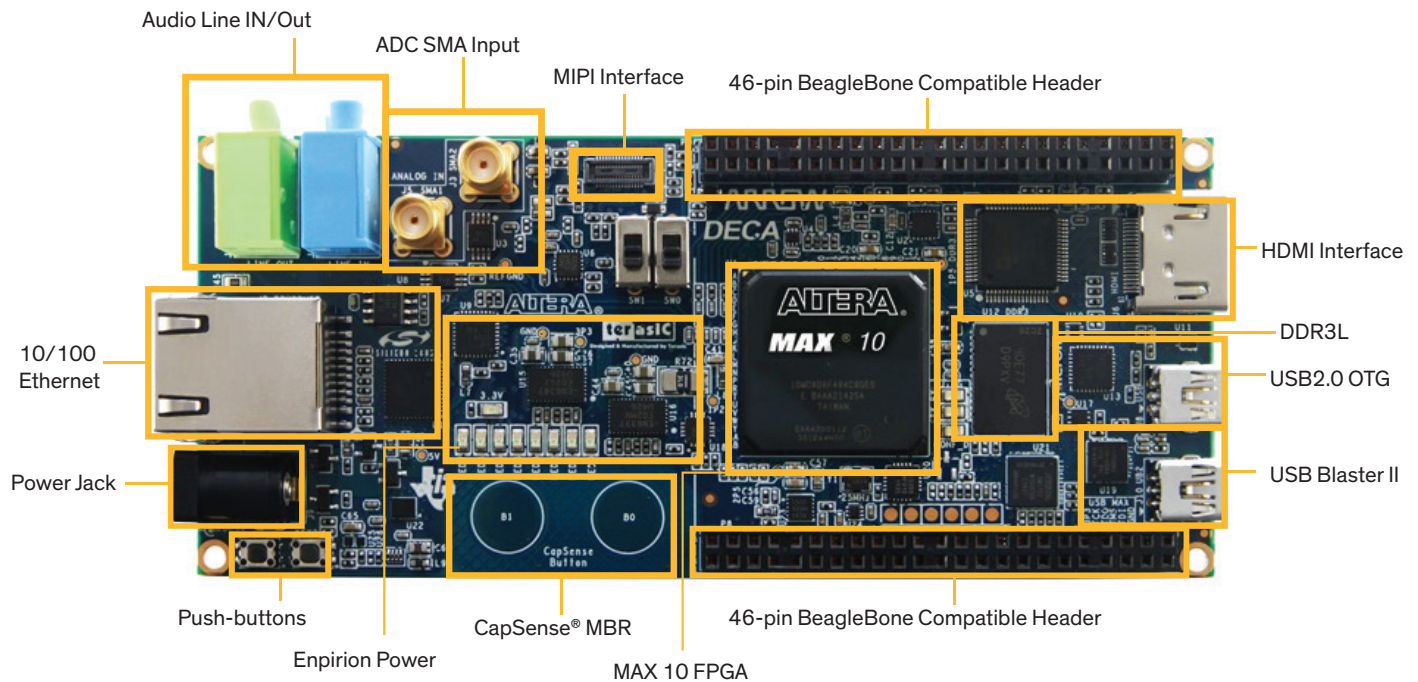
Board Features

One MAX[®] 10 FPGA (10M50DAF484C6G)

- 50,000 LEs
- 1,638 Kbit (Kb) M9K memory
- 512 Kbit (Kb) user flash memory
- Four phase locked loops (PLLs)
- 144 18×18-bit multipliers
- Two ADC blocks – 1 MSPS, 12-bit, 9-channels each
- 18 analog inputs
- One on-chip temperature sensor
- 360 general purpose input/output (GPIO)
- Non-volatile self-configuration with dual-boot support

For more information
visit our website:
arrow.com/deca





POWER

- Requires external power supply, 5V @ 3A
- Board level power driven by Altera Enpirion PowerSoCs (EP5358QI, EN6347QI) and Enpirion LDOs (EY1501DI-ADJ)

CLOCKING CIRCUITRY

- 8-output generator (Silabs Si5350C-B03975-GM)
- CMEMs Oscillator, reference to generator, 25 MHz (SiLabs Si501xxx)

MEMORY

- 4Gb DDR3 SDRAM (256Mb x 16) (Micron MT41K256M16HA-125 IT:E)
- Quad Serial NOR Flash (512Mb) (Micron N25Q512A83GSF40F)

GENERAL PURPOSE I/O

- BeagleBone compatible header (Molex 90151-2246)
- Two push-buttons
- Two switches
- Eight user LEDs

SENSORS

- Gesture, Proximity and Ambient Light Sensor (Silabs SI1143-A11-GMR)
- Humidity Sensor (Texas Instruments HDC1000YPAR)
- Temperature Sensor (Texas Instruments LM71CIMF)
- Power Monitor (Texas Instruments INA230AIRGTR)
- Accelerometer, 3-Axis, Analog interface

INTERFACES

- CapSense® MBR3 (Mechanical Button Replacement) (Cypress CY8CMBR3102-SX1I)
- USB2.0 Transceiver PHY (Texas Instruments TUSB1210BRHBT)
- 10/100 Ethernet PHY (Texas Instruments DP83620SQ/NOPB)
- Audio CODEC (Texas Instruments TLV320AIC3254IRHBR)
- Micro SD Card interface
- Two SMA analog input jacks
- HDMI 1.4 Transmitter

In Person

Components

800 833 3557

Online

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Five Years Out