MAX V CPLD Development Kit

Altera’s MAX V CPLD Development Kit provides a comprehensive, low-cost hardware platform to quickly begin developing low-cost, low-power CPLD designs. With this platform, you can:

- Develop designs for the 5M570Z CPLD.
- Measure CPLD power (VCCINT and VCCIO).
- Bridge between two different I/O voltages (adjustable VCCIO on CPLD Bank 2).
- Interface to external functions and devices, via four connectors.
- Read and write to memories:
  - 8-kilobits (Kb) user flash memory (UFM) available within 5M570Z CPLD
  - I2C or SPI EEPROMs (user installed)
- Come up to speed quickly with your CPLD design by reusing the example designs provided by the kit's Board Test System.
- Reuse the kit's PCB board and schematic as model for your design.
Development Kit Contents

- MAX V CPLD development board (Figure 1)
  - MAX V device: 5M570Z, –5 speed, 256-pin FineLine BGA (FBGA) package
  - Configuration - Embedded USB-Blaster™ circuitry (JTAG)
  - Communication – USB port (type B)
  - Clocks:
    - Single-ended 10-MHz oscillator (4-pin, socket mounted)
    - CPLD internal oscillator 4.4 MHz (typical, user configurable frequency)
- Multiple expansion connectors:
  - Two general-purpose headers (2X 20-pin)
  - Standard PC speaker header (4-pin)
  - Two direct current (DC) motor headers (6-pin)
- Memories (not including the kit, PCB footprint only, optional customer installation):
  - I2C EEPROM
  - SPI EEPROM
- Power – USB cable (included, Type A-B)
- Power measuring circuitry
- User-controlled push buttons, a capacitive sense push button, and LEDs
- Restriction of hazardous substances (RoHS) compliant board and contents
- MAX V CPLD Development Kit software content
  - GUI-based Board Test System to exercise selected on-board components
  - User guide, reference manual, board schematics, layout, and design files
- Quartus® II Web Edition design software
  - Free and downloadable from www.altera.com

Table 1. Altera’s MAX V CPLD Development Kit Ordering Information

<table>
<thead>
<tr>
<th>Ordering Code</th>
<th>List Price</th>
<th>Information</th>
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<td>DK-DEV-5M570ZN</td>
<td>$74.95</td>
<td>Pre-orders accepted: Dec. 2010</td>
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<td>Initial kit shipments: Feb. 2011</td>
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