

# Intel® Pentium® M Processor with Intel® 855GME and Intel® FW82801DB Development Kit

### **Product Overview**

This development kit from Intel—based on the Intel® Pentium® M processor, the Intel® 855GME chipset, and the Intel® FW82801DB I/O Controller Hub 4 (ICH4) platform—enables outstanding instruction execution per watt and features the performance and graphics capability to support dual independent displays. It is an excellent choice for developers within the traditional embedded market segment, including kiosks, industrial automation, telematics and Point-of-Service (POS) applications.

The Intel Pentium M processor utilizes a new microarchitecture to meet the current and future demands of high-performance, low-power embedded computing, while remaining software compatible with previous members of the Intel® microprocessor family. It provides scalability from the Ultra Low Voltage Intel® Celeron® M processor through the Intel Pentium M processor 745 with 2 MB of L2 Cache.

# **Product Highlights**

#### **Evaluation Board**

- Intel Pentium M processor at 1.6 GHz with a 400 MHz Front Side Bus (FSB) and μFC-PGA 478 packaging. Also supports the Intel Pentium M processor 745 with 2 MB L2 Cache in the same μFC-PGA package, and the Ultra Low Voltage Intel Celeron M processor in FC-BGA packaging
- Intel® 855GME Graphics Memory Controller Hub (GMCH) supports 200/266/333 MHz DDR SDRAM devices, addressable up to 2 GB with high-density 512 Mbit technology
  - DVOB and DVOC



- Dedicated LVDS interface
- Standard VGA
- AMI evaluation BIOS
- Intel FW82801DB I/O Controller Hub 4 (ICH4)
  - ATA/100, 66 or 33
  - Six USB 2.0 ports
  - AC'97 Codec
    - 10/100 LAN
    - 32/33 MHz PCI bus
- Built-in POST code debugger

#### **Board Peripheral Features**

 Super I/O to support floppy, PS/2 mouse and serial/parallel ports

#### **User-Accessible On-Board Connectors**

- PS/2 mouse, keyboard, serial/parallel port
- VGA
- LVDS connector
- Six USB 2.0 ports
- 10/100 Ethernet



# Intel in Communications

- Primary and secondary IDE connectors
- Floppy connector
- Three 32-bit PCI slots
- One AGP connector (ADD slot)
- ITP connector
- Two DDR DIMM slots

#### Included in the Kit

- Development board
- CPU thermal solution
- One 128 MB/266 MHz DDR DIMM
- ATA hard drive

#### **Product Benefits**

The Intel Pentium M Processor with Intel 855GME and Intel FW82801DB Development Kit is an evaluation kit with hardware, software, and supporting documentation designed for use in embedded computing applications. This and other development kits from Intel provide a fully working product with a range of performance options that can be modified or used immediately for product development. These kits provide a platform with a validated processor/chipset combination, allowing software vendors to test BIOS and operating system software.

With this kit, developers can design on a single board to provide a range of performance options. This can reduce design and validation efforts, lower the total cost-of-ownership by reducing inventory and manufacturing costs, and facilitate faster time-to-market.

# **Software Overview**

In order to provide customers with a complete development environment in the development kit, an ATA hard drive is included for use with customer applications and operating systems. Any software/firmware provided in the kit is subject to change without notice. For the most recent updates, please refer to the Intel Pentium M Processor with Intel 855GME and FW82801DB Development Kit Web site at: http://developer.intel.com/design/intarch/devkits/855gme.htm

# **Development Kit Ordering Information**

■ EIDPM855HDDVKT

#### **Intel Access**

Developer's Site:

Embedded Intel® Architecture Home Page:

Intel Technical Documentation Center:

developer.intel.com

developer.intel.com/design/intarch

www.intel.com/go/techdoc

(800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada)

International locations please contact your local sales office.

General Information Hotline: (800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

# For more information, visit the Intel Web site at: developer.intel.com

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