Intel in Communications

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



run
Better, faster and further.

- 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:	developer.intel.com
Embedded Intel® Architecture Home Page:	developer.intel.com/design/intarch
Intel Technical Documentation Center:	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**

UNITED STATES AND CANADA
Intel Corporation
Robert Noyce Bldg.
2200 Mission College Blvd.
P.O. Box 58119
Santa Clara, CA 95052-8119
USA

EUROPE
Intel Corporation (UK) Ltd.
Pipers Way
Swindon
Wiltshire SN3 1RJ
UK

ASIA-PACIFIC
Intel Semiconductor Ltd.
32/F Two Pacific Place
88 Queensway, Central
Hong Kong, SAR

JAPAN
Intel Kabushiki Kaisha
P.O. Box 115 Tsukuba-gakuen
5-6 Tokodai, Tsukuba-shi
Ibaraki-ken 305
Japan

SOUTH AMERICA
Intel Semicondutores do Brazil
Rue Florida, 1703-2 and CJ22
CEP 04565-001 Sao Paulo-SP
Brazil

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. Intel products are not intended for use in medical, life saving, or life sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

*Other names and brands may be claimed as the property of others.

Copyright © 2004 Intel Corporation. All rights reserved.

Intel, the Intel logo, Celeron, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Printed in USA. 0504/OCG/DC/XX/PDF Please Recycle 253222-003