Product Overview

The Intel® Atom™ processor E660® with Intel® Platform Controller Hub EG20T Development Kit offers an excellent platform for the evaluation and rapid development of a variety of embedded applications. The platform included in this kit is comprised of a COM Express* module with the processor and a µATX carrier board with the platform controller hub, connected together and packaged in a briefcase.

The Intel® Atom™ processor E660 integrates an Intel Atom processor core (512K L2 cache, 24K data and 32K instruction L1 cache), 3D graphics and video encode/decode, plus memory and display controllers in one package. The COM Express module provides industry-standard PCI Express* as the primary processor-to-I/O controller interface to the carrier board. The Intel® Platform Controller Hub EG20T integrates a range of common I/O blocks required in many market segments such as industrial automation, retail, gaming, and digital signage. These include SATA, USB host and device, SD/SDIO/MMC, Gigabit Ethernet MAC as well as general embedded interfaces such as CAN, IEEE® 1588, SPI, I2C,* UART and GPIO.

Both the processor and platform controller hub include embedded life cycle support and are supported by a range of software ingredients.

This development kit enables early evaluation of applications by developers. Reference design materials included in the kit, such as schematics, board layout files and a detailed bill of materials, can help to reduce hardware development time for next-generation platforms.

Board and Peripheral Features

- Intel Atom processor E660 at 1.3 GHz and 3.60 watts thermal design power (TDP)
- DDR2, dual ranks, 800 MHz, 1 GB soldered down system memory
- Intel Platform Controller Hub EG20T at 1.55 watts TDP
- Two (2) PCI Express x1 bus add-in card slots (X10, X52) utilizing x4 connectors
- One (1) 32-bit PCI connector slot
- One (1) PCI Express mini card slot (x8), alternatively used for PCI Express slot X10
- One (1) SDVO card slot supporting ADD2-N cards
- One (1) LVDS connector supporting single channel 18/24-bit LVDS interface
- Two (2) SATA Gen2 ports
- Four (4) USB 2.0 host ports
- Four (4) serial ports
- One (1) USB client port
- One (1) TPM header
- One (1) CAN bus header
- One (1) Gigabit Ethernet port
- Two (2) SD/SDIO/MMC ports
- PS/2 keyboard and mouse ports
- Six (6) dedicated audio jacks
Included in the Kit

• Evaluation platform including COM Express module and carrier board
• Timesys Fedora Remix* operating system preloaded on hard disk
• User’s guide and software CD with reference design materials, drivers and utilities
• Pre-installed jumpers
• 16 Mbit SPI flash with BIOS
• ATX power supply
• DVD-ROM drive
• USB floppy drive
• LVDS panel and backlight inverter
• SATA Gen2 hard drive
• Live USB sticks with Wind River Embedded Development Kits
• Associated cables

Software Overview

The following independent operating system and BIOS vendors provide support for this platform:

<table>
<thead>
<tr>
<th>OPERATING SYSTEM</th>
<th>CONTACT</th>
<th>BIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows* XP SP3</td>
<td>Intel provides drivers²</td>
<td>American Megatrends</td>
</tr>
<tr>
<td>Microsoft Windows Embedded Standard 2009</td>
<td>Intel provides drivers²</td>
<td>Insysy Software</td>
</tr>
<tr>
<td>Microsoft Windows Embedded Standard 7</td>
<td>Intel provides drivers²</td>
<td>Phoenix Technologies</td>
</tr>
<tr>
<td>Microsoft Windows Embedded POS Ready 2009</td>
<td>Intel provides drivers²</td>
<td>Byosoft</td>
</tr>
<tr>
<td>Microsoft Windows 7</td>
<td>Intel provides drivers²</td>
<td></td>
</tr>
<tr>
<td>Microsoft Windows Embedded CE 6.0 R3</td>
<td>Intel provides drivers²</td>
<td></td>
</tr>
<tr>
<td>Timesys Fedora Remix*</td>
<td>Adeneo, BSQUARE, Wipro</td>
<td></td>
</tr>
<tr>
<td>MeeGo 1.0*</td>
<td>Fedora community, Timesys</td>
<td></td>
</tr>
<tr>
<td>QNX Neutrino*</td>
<td>MeeGo community, Wind River</td>
<td></td>
</tr>
<tr>
<td>Wind River VxWorks*</td>
<td>QNX Software Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wind River</td>
<td></td>
</tr>
</tbody>
</table>

Intel strives to provide customers with a complete development environment supporting customer applications and operating systems. Any software provided in these development kits is subject to change without notice. Customers are encouraged to check for software updates at intel.com/design/intarch/devkits/index.htm.

Order Information

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>PRODUCT CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Atom™ processor E660 with Intel® Platform Controller Hub EG20T Development Kit</td>
<td>EMBTNCBITCCBDVK</td>
</tr>
</tbody>
</table>

Intel in Embedded and Communications: intel.com/embedded

¹ Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See www.intel.com/products/processor_number for details.

² Drivers available at: downloadcenter.intel.com (enter chipset name).

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

Please Recycle 324218-004US