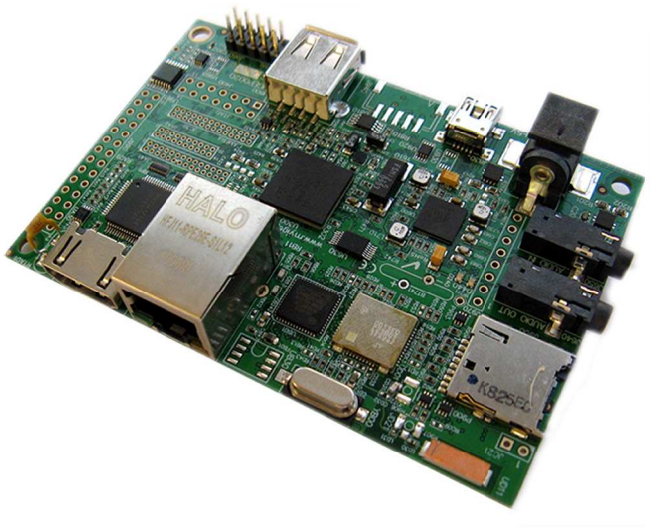
# IGEPv2 BOARD OMAP3530@720MHz



IGEPv2 board is a fanless, low cost single board computer, based on the Texas Instrument OMAP3530 ARM Cortex A-8 processor that unleashes laptop-like performance, without the expense or noise of desktop machines.

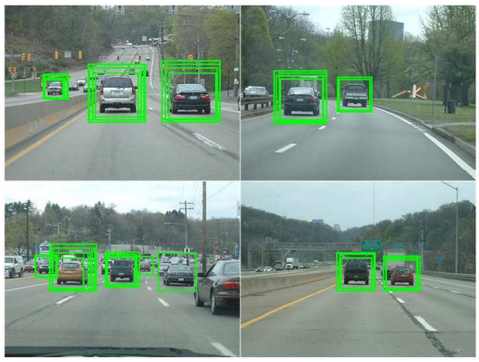
The capabilities of the IGEPv2 board, serves the need of the system requirements of many applications, giving our customers world-class options for the development and production of OMAP35x based products.

It features 4-Gbit of DDR LPSDRAM and 4-Gbit of OneNAND™ Flash Memory, Ethernet 10/100 Mb Base10/100, WIFI IEEE 802.11b/g and Bluetooth 2.0 with integrated antenna.

Its fast ARM CPU (TI OMAP 3530 running at 720 MHz) and graphical capabilities allowing it to be used for services usually performed by desktop or server CPUs.

The OMAP35xx family processors are based on the enhanced device architecture and are integrated on 45-nm process technology. This architecture of high-performance, applications processor is designed to provide best in class ARM and Graphics performance while delivering low power consumption. This balance of performance and power allow the device to support the following example applications:

- Portable Data Terminals
- Navigation
- Auto Infotainment
- Gaming
- MedicalImaging
- Home Automation
- Human Interface
- IndustrialControl
- Test and Measurement
- Single board Computers
- Audio and image processing



IGEPv2 board is available with a Linux board support package (BSP) that includes a GNU-Linux kernel, an SDK, and precompiled software available on git repositories. In addition, the board compatible with other operating systems that support TI's ARM Cortex-A8 processors, including Windows Embedded CE.

Equipped with Ethernet 10/100 Base T, USB host interface, USB 2.0 On-The-Go miniAB socket, WIFI 802.11 b/g, Bluetooth 2.0, stereo output audio, and many more features, this board can meet the needs of a variety of space- and power-constrained commercial and industrial embedded aplications that require high-quality graphics and/or video.

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# OMAP35xx Processor Highlights

| | |
|---|---|
| CPU | ARM Cortex-A8 + DSP C64+ |
| ARM Frequency (MHz) | 720 |
| DSP Frequency (MHz) | 520 |
| On chip L1/SRAM | 112 KB (ARM CORTEX-A8) |
| On chip L2/SRAM | 96 KB (ARM CORTEX-A8) |
| RAM | 64 KB |
| ROM | 16 KB (DSP), 32 KB (ARM CORTEX-A8) |

POWERVR SGX™ Graphics Accelerator
Advanced Very-Long-Instruction-Word (VLIW) TMS320C64x+™ DSP Core
High Performance Image, Video, Audio (IVA2.2™) Accelerator Subsystem

# Board Highlights

PC like performance at low power request

4 scalable levels of performance (OMAP3503, OMAP3515, OMAP3525 and OMAP3530)

Fanless, no noise embedded SBC. High endurance.

Over 1200 Dhrystone MIPS using the superscalar ARM Cortex A-8 with highly accurate branch prediction and 256KB L2 cache running at up to 600MHz

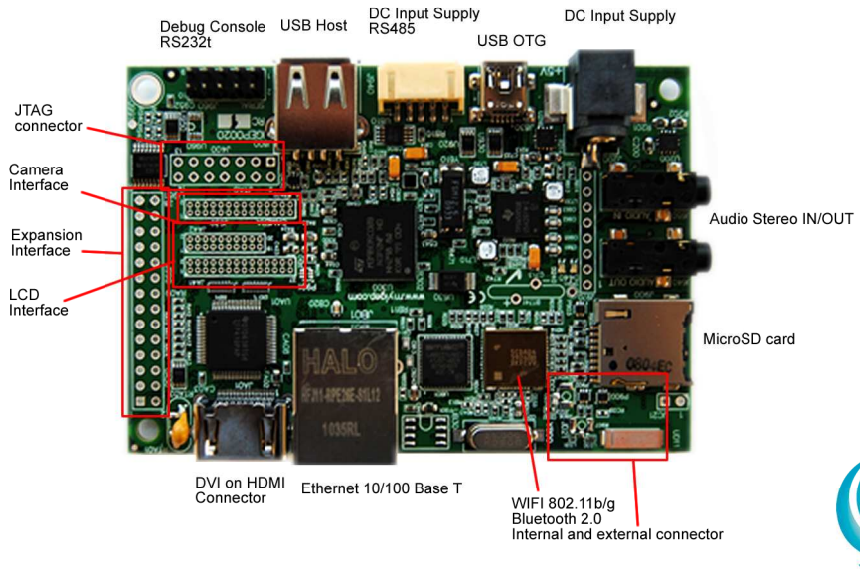
OpenGL© ES 2.0 capable 2D/3D graphics accelerator capable of rendering 10 million polygons per second

MS320C64x+ DSP for versatile signal processing at up to 430MHz

PoP Package pitch 0.4/05 mm, memory density starting at 128 MB LPDDR and 256 MB Nand Flash

IGEPv2 BOARD is incredible small, It's size is 93x65mm

GNU-Linux Kernel, SDK and precompiled software

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# Features

Processor
OMAP3530. Applications Processor with ARM Cortex-A8 CPU, a C64x+ digital signa processor (DSP) core and the POWERVR SGX for 2D and 3D graphics acceleration (Architecture delivering 10 MPoly/sec)

Power Managment
TPS65950 (Integrated Power Management IC with 3 DC/DC's, 11 LDO's, Audio Codec, USB HS Transceiver)

Memory
4Gb NAND/ 4Gb Mobile Low Power DDR SDRAM @ 200 MHz (Package on Package - PoP technology)

On board Ethernet 10/100 Mb BaseT (SMSC LAN9221i)

On board microSD slot

On board USB 2.0 OTG miniAB socket for power and data

On board USB 2.0 Host interface

On board DVI-D for connecting digital computer monitors.

Wireless
Wifi 802.11 b/g
Bluetooth 2.0
Integrated antena and connector for externa antenna.

Features
I2C, UART, SPI, Camera interface, backup battery, DSS interface, RS485 and many more
Temperature Range: -40 to +80º C.
EMI and EMC precertificate. CE compliant

Connections
Stereo audio in and out for a microphone and headphones or speakers.
Expansion connector with I/O, SPI, UART...
Expansion connector for DSS and camera interface

Custom Component Specification - Price Reductions
For volume orders only, the price of a IGEPv2 board can be reduced by requesting specific component(s) not be installed. Please contact sales@iseebcn.com

# About ISEE

ISEE is an innovative company with the highest cutting edge technology around Europe, who works with a group of open minded and experienced hardware and software engineers that provide the best service to its customers, resulting in cost efficient, successful project managements, without sacrificing the quality of the product.

In addition to manufacturing, system design team and support team, we ensure that we are available to answer questions, product assistance, product service and product support.

ISEE customers include telecommunications, networking, medical, electrical engineering; monitor embedded systems and many more.

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