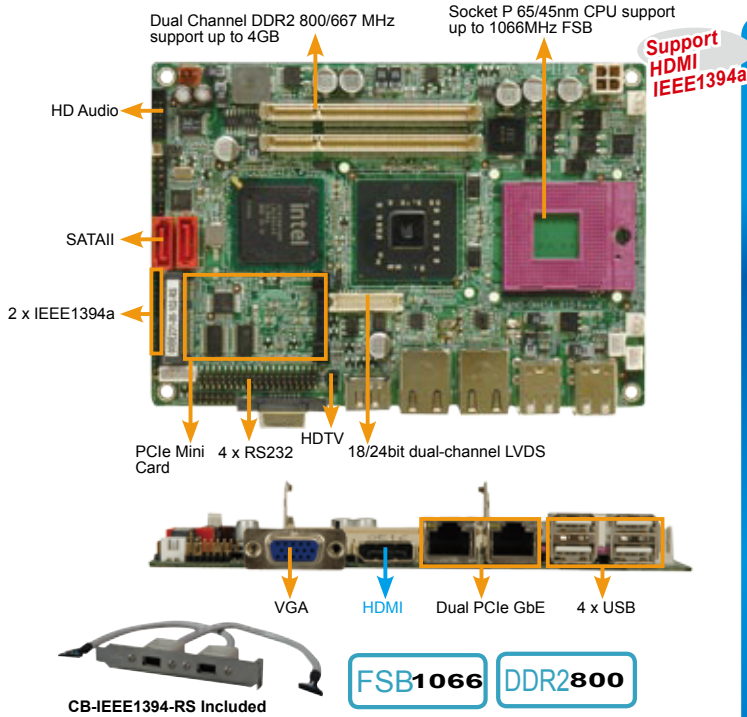


# epic NANO-GM45A

EPIC SBC supports Intel® 45nm mobile  
Core™ 2 Duo processor with Intel® GM45 &  
ICH9M platform



## High-Definition Multimedia Interface

The High-Definition Multimedia Interface (HDMI) is a compact audio/video interface for transmitting uncompressed digital data. It represents a digital alternative to consumer analog standards such as Radio Frequency (RF) coaxial cable, composite video, S-Video, SCART, component video, D-Terminal, and VGA. HDMI connects digital audio/video sources such as set-top boxes, Blu-ray Disc players, personal computers, video game consoles, and AV receivers to compatible digital audio devices, computer monitors, and digital televisions.



## Features of HDMI

- **Higher Speed - 10.2 Gbps**  
increases its single-link bandwidth from 165 MHz (4.95 Gbps) to 340 MHz (10.2 Gbps) to support the demands of future high definition display devices
- **New Lossless Audio Formats**  
support for new, lossless compressed digital audio formats Dolby® TrueHD and DTS-HD Master Audio™ for theater-like, professional sound quality.
- **Lip Sync**  
HDMI incorporates an automatic audio/video syncing capability that allows devices to perform this synchronization automatically with accuracy.
- **New Mini Connector**  
With small portable devices such as HD camcorders and still cameras demanding seamless connectivity to HDTVs
- **Deep Color**  
HDMI supports 30-bit, 36-bit and 48-bit (RGB or YCbCr) color depths, up from the 24-bit depths in previous versions of the HDMI specification.
  - Lets HDTVs and other displays go from millions of colors to billions of colors
  - Eliminates on-screen color banding, for smooth tonal transitions and subtle gradations between colors
  - Enables increased contrast ratio
  - Can represent many times more shades of gray between black and white.



Color banding is perceptible to the human eye with standard color displays



Using billions of colors, Deep Color virtually eliminates color banding

## • Broader Color Space:

- The next generation "xvYCC" color space can display virtually the entire gamut of colors viewable by the human eye
- Next-generation "xvYCC" color space supports 1.8 times as many colors as existing HDTV signals
- Lets HDTVs display colors more accurately
- Enables displays with more natural and vivid colors



## Specifications

- ◆ **CPU**  
Socket P Intel® Core™ Duo Processor with 1066/800 MHz FSB  
Socket P Intel® Celeron® M Processor with 667 MHz FSB
- ◆ **System Chipset**  
Intel® GM45/ICH9M
- ◆ **BIOS**  
AMI BIOS
- ◆ **System Memory**  
Two 200-pin 800/667MHz DDR2 SDRAM SO-DIMM supported (system max. 4GB)
- ◆ **Ethernet Chipset**  
Dual Realtek 8111CP GbE Chipset
- ◆ **I/O Interface**  
4 x USB2.0  
2 x SATAII  
4 x RS-232  
2 x IEEE 1394a
- ◆ **Expansions**  
PCIe mini card
- ◆ **Super I/O**  
Fintek F81216D
- ◆ **Audio**  
Realtek ALC888 HD Audio
- ◆ **Display Interface**  
Mobile Intel® Graphics Media Accelerator 4500MHD  
Analog CRT / 18/24-bit dual channel LVDS / HDTV-out  
HDMI supports up to 1080p
- ◆ **Watchdog Timer**  
Software programmable supports 1 ~255 sec. system reset
- ◆ **Power Supply**  
12V only, AT/ATX supported
- ◆ **Power Consumption**  
12V@3.74A (Intel® Core™2 Duo T9600 2.8GHz, 2GB DDR2 800 MHz)
- ◆ **Temperature**  
Operation: 0°C~ 60°C ( 32°F~ 140°F)
- ◆ **Humidity**  
Operation: 5% ~95 non-condensing
- ◆ **Dimensions**  
165 mm x 115 mm
- ◆ **Weight**  
GW: 700g, NW 350g

## Features

1. Intel® 45nm mobile Core™ 2 Duo processor (Penryn) supported
2. High quality media MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC DX10) supported
3. DDR2 800/667 MHz dual channel SDRAM supported up to 4GB
4. 18/24-bit dual channel LVDS / Analog CRT / HDTV output/HDMI supported
5. Support 4x COM, 4x USB, 2x SATAII, 2x IEEE1394a

## Packing List

1 x NANO-GM45A single board computer
1 x Mini jumper pack
1 x Power cable (P/N: 32100-087100-RS)
2 x SATA cable (P/N:32000-062800-RS)
1 x Audio cable (P/N: 32000-072100-RS)
1 x Dual Port IEEE1394 cable (P/N: CB-IEEE1394-RS)
1x Four RS-232 cable (P/N:32200-025401-RS)
1 x Utility CD
1 x QIG (Quick Installation Guide)

## Ordering Information

Part No.	Description
NANO-GM45A-R10	EPIC SBC supports Intel® 45nm mobile Core™2 Duo processor with Intel® GM45 & ICH9M platform, DDR2, dual GbE, LVDS/CRT/HDTV-out, SATAII, USB2.0
CPU Cooler	CF-479B-RS
32000-083702-RS	HDTV cable set with S-Video, composite and component Interfaces
32100-088600-RS	SATA power cable
32000-114000-RS	SATA 5V power output cable Kit for NANO series
32100-043403-RS	ATX power cable