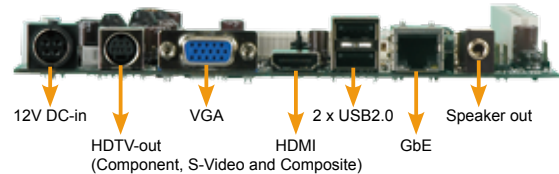
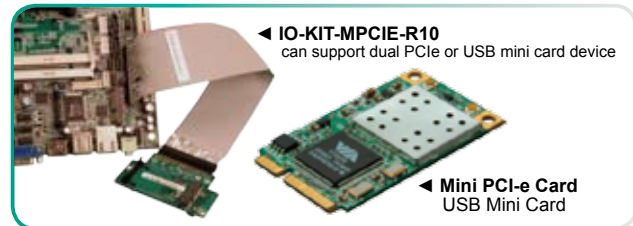
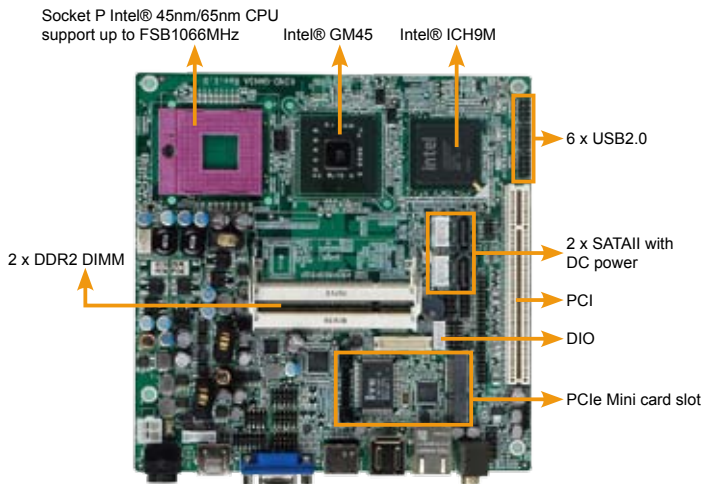


KINO-GM45A

Mini-ITX SBC with Socket P for Intel® 45nm mobile Core™2 Duo Penryn CPU, VGA/HDMI/LVDS, PCIe GbE, USB2.0, PCIe mini, SATAII and Audio, RoHS



Features

1. Socket P for Intel® 45nm mobile Core™2 Duo Penryn CPU with FSB 1066 MHz
2. Intel® GMA4500MHD for DX10, Shader Model 4.0, high performance MPEG-2 decoding, WMV9 (VC-1) and H.264 (AVC) support
3. Display output support by VGA, LVDS, HDMI, HDTV
4. Single 12V DC input, 4 x COM, 2 x SATA, 8 x USB2.0

Specifications

- ◆ CPU
Socket P Intel® 45nm Core™2 Duo processor with 1066/800/667MHz FSB (Penryn Core)
- ◆ System Chipset: Intel® GM45 + ICH9M
- ◆ BIOS: AMI BIOS
- ◆ Memory
Two 200-pin 667/800 DDR2 dual-channel SO-DIMM supported (system max. 4GB)
- ◆ Ethernet: 1 x GbE Realtek RTL8111CP
- ◆ I/O Interface
8 x USB2.0
2 x SATAII
2 x SATA Power
1 x 6-pin pin header for KB/MS
3 x RS-232 (COM1, COM3, COM4)
1 x RS-232/422/485 (COM2)
- ◆ Graphic: Intel® GMA4500MHD
- ◆ Expansion: 1 x PCIe mini card, 1 x PCI
- ◆ SPDIF: 1 x 5pin header
- ◆ Digital I/O:
8-bit digital I/O, 4-bit input/ 4-bit output
- ◆ Super I/O: ITE IT8718F
- ◆ Display Output
VGA integrated in the Intel® GM45 support Hot-Plug and resolution up to QXGA
18/24-bit dual-channel LVDS support
HDMI support up to 1080p
HDTV for Component, S-Video and Composite Output Interfaces support
- ◆ Audio: Realtek ALC888 HD codec
- ◆ Watchdog Timer
Software Programmable support 1~255 sec. System reset
- ◆ Power Supply
Single voltage 12V DC input
1 x external DIN 4pin DC jack
1 x internal 2x2pin power connector
- ◆ Power Consumption
12V@5.56A (2.0GHz Intel® Core™2 Quad Q9000 with 1GBx2 DDRII 800MHz)
- ◆ Temperature
Operation: 0°C ~ 60°C (32°F ~ 140°F)
- ◆ Humidity
Operation: 5% ~95% non-condensing
- ◆ Dimensions: 170mm x 170mm
- ◆ Weight: GW: 1000g / NW: 390g

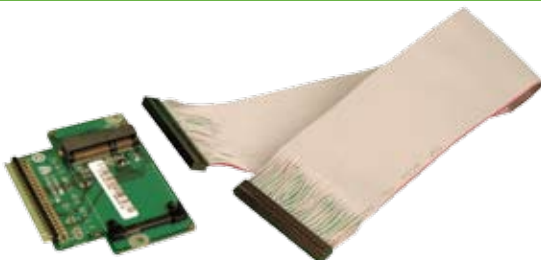
Packing List

1 x KINO-GM45A single board computer	1 x IO shielding (P/N: 45014-0030C0-00-RS)
1 x Dual RS-232 cable (P/N: 19800-000112-RS)	1 x KB/MS Y cable (P/N: 32000-023800-RS)
1 x Audio Cable (P/N: 32000-072100-RS)	1 x Mini Jumper Pack
2 x SATA with power output cable (P/N: 32801-000100-100-RS)	1 x QIG (Quick Installation Guide)
	1 x Utility CD

Ordering Information

Part No.	Description
KINO-GM45A-R10	Mini-ITX SBC with Socket P for Intel® 45nm mobile Core 2 Duo™ Penryn CPU, VGA/HDMI/LVDS, PCIe GbE, USB2.0, PCIe mini, SATAII and Audio, RoHS
IO-KIT-MPCIE-R10	PCIe/USB mini card expansion module
CB-USB02-RS	Dual USB cable
CF-479B-RS	CPU Cooler
32100-088600-RS	SATA Power cable
SAIDE-KIT01-R10	SATA to IDE/CF Converter board
WMPCIE-V01-R10	PCIe Mini card wireless LAN Module
WMUSB-V01-R10	USB Mini card wireless LAN Module
32200-026500-RS	RS-232/422/485 cable
32200-000049-RS	Single port RS-232 cable
32100-192900-RS	One 4-pin(2x2) to one 4-pin(1x4) DC power cable with terminal block
32000-083100-RS	HDTV out cable
63000-FSP096AHB-RS	96W/12V Power Adaptor 90VAC~260VAC, DIN 4 PIN

IO-KIT-MPCIE-R10 *Dual PCIe/USB mini card expansion module*



Packing List

1 x PCIe/USB mini card expansion module (PN:IO-KIT-MPCIE-R10)
1 x connection cable (PN:32225-000100-100-RS)
1 x QIG

Ordering Information

Part No.	Description
IO-KIT-MPCIE-R10	PCIe/USB mini card expansion module

Dimensions (Unit : mm)

