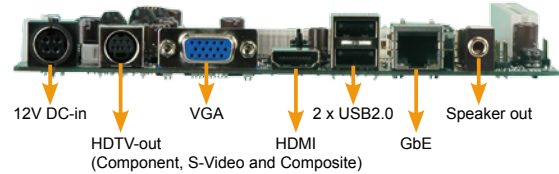
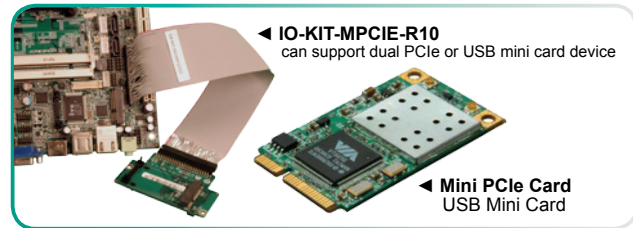
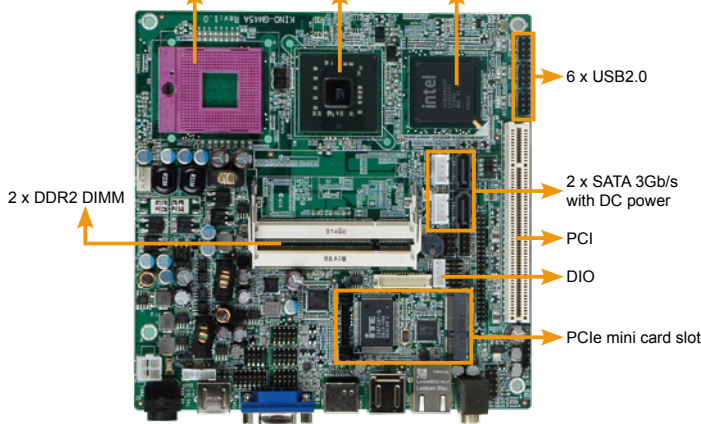


KINO-GM45A

Mini-ITX SBC with Socket P for Intel® 45nm mobile Core™2 Duo Penryn CPU, VGA/HDMI/LVDS, PCIe GbE, USB2.0, PCIe mini, SATA 3Gb/s and Audio,



Socket P 45nm/65nm Intel® CPU support up to 1066 MHz FSB Intel® GM45 Intel® ICH9M



Features

1. Socket P for 45nm Intel® 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, four COM, two SATA, eight USB2.0
5. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

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 MHz dual-channel DDR2 SO-DIMM supported (system max. 4GB)
- ◆ Ethernet: Realtek RTL8111CP GbE controller
- ◆ I/O Interface: 8 x USB2.0, 2 x SATAII, 2 x SATA 3Gb/s 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
- ◆ Digital I/O: 8-bit digital I/O, 4-bit input/ 4-bit output
- ◆ Super I/O: ITE IT8718F
- ◆ Audio: Realtek ALC888 HD codec
- ◆ 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
- ◆ Watchdog Timer: Software Programmable support 1~255 sec. System reset
- ◆ Power Supply: Single voltage 12V DC input, 1 x external 4-pin DIN DC jack, 1 x internal 4-pin (2x2) power connector
- ◆ Power Consumption: 12V@5.56A (2.0GHz Intel® Core™2 Quad Q9000 with two 1GB 800MHz DDR2 SO-DIMMs)
- ◆ 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

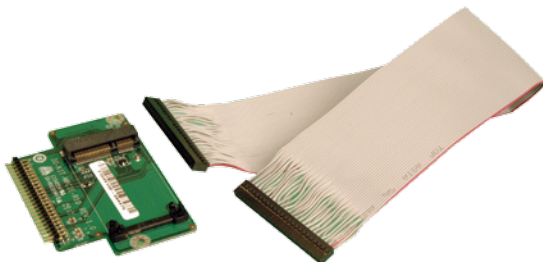
Packing List

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



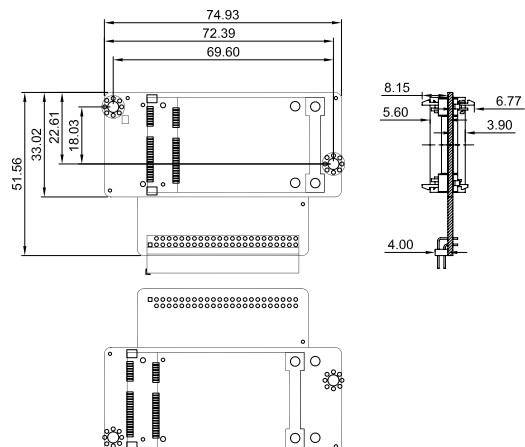
Packing List

1 x PCIe/USB mini card expansion module (P/N: IO-KIT-MPCIE-R10)
1 x connection cable (P/N: 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)



1 Industrial Computing Solutions

2 Embedded Computing Solutions

3 Industrial Data Collector and Controller

4 Video Capture Solutions

5 I/O Communication Solutions

6 Panel Solutions

7 ORing Network Communication

8 Power Supply Peripherals