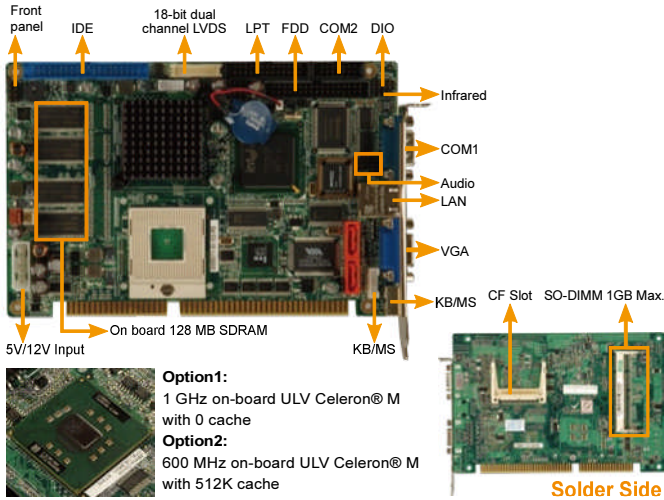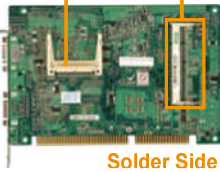# IOWA–8522

Half-size ISA CPU card supports Intel® Pentium® M or Celeron® M processors with a 400 MHz FSB and comes with LVDS, CRT, dual-display function, LAN, SATA with RAID support and USB 2.0

Front panel | IDE | 18-bit dual channel LVDS | LPT | FDD | COM2 | DIO

Infrared
COM1
Audio
LAN
VGA
KB/MS

On board 128 MB SDRAM
5V/12V Input
KB/MS

CF Slot   SO-DIMM 1GB Max.

Option1:
1 GHz on-board ULV Celeron® M with 0 cache
Option2:
600 MHz on-board ULV Celeron® M with 512K cache

Solder Side

FSB 400 | DDR 266 | Dual Display | Hi-Speed USB 2.0 | Fanless | One Key Recovery iEi symantec.

Features

1. Supports Intel® Pentium® M or Celeron® M processors with 400MHz FSB
2. On-board 128MB DDR SDRAM and SO-DIMM DDR support up to 1GB
3. Analog CRT, 18/24-bit dual channel LVDS output and dual display supported
4. One RS-232, one RS-232/422/485 and four USB 2.0
5. Two SATA with RAID 0, 1
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

◆ **CPU**
Socket 479: Intel® Pentium® M or Celeron® M with a 400 MHz FSB
On-board: 1 GHz zero cache or 600 MHz 512 KB cache Intel® Celeron® M
◆ **System Chipset**
Intel® 852GM + ICH4
◆ **BIOS**
AMI BIOS
◆ **Memory**
128 MB on-board DDR SDRAM
One 200-pin 1 GB (max.) 200 MHz or 266 MHz DDR SDRAM SO-DIMM supported
◆ **Ethernet**
Intel® 82562ET 10/100 Ethernet controller
◆ **I/O Interfaces**
1 x RS-232   1 x RS-232/422/485
1 x LPT   1 x FDD
1 x IDE   1 x CF Type II
4 x USB 2.0 (by header)
1 x Infrared Interface
1 x 6-pin wafer on board for KB/MS
2 x SATA with VIA VT6421A RAID 0, 1 function

◆ **Digital I/O**
8-bit digital I/O (4-bit input, 4-bit output)
◆ **Audio**
On board pin header supports 5.1 channel output via IEI audio kit
◆ **Display**
18/24-bit dual-channel LVDS
Analog CRT
◆ **Watchdog Timer**
Software programmable support 1~255 sec. system reset
◆ **Power Supply**
5V/12V, AT/ATX support
◆ **Power Consumption**
5 V @ 5.29 A, 12 V @ 0.13 A Intel® Pentium® M 2.0G/1GB DDR SDRAM
◆ **Temperature**
0ºC ~ 60ºC (32ºF ~ 140ºF)
◆ **Humidity**
5% ~ 95% non-condension
◆ **Dimensions**
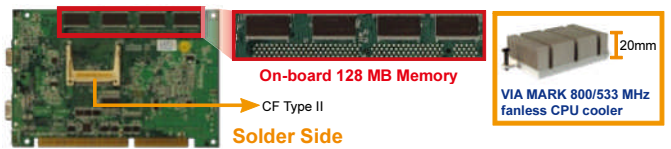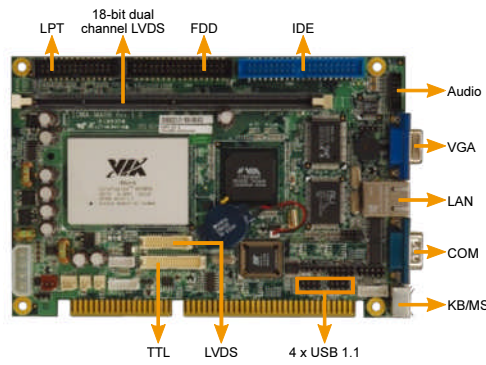185 mm x 122 mm

Packing List

1 x IOWA-8522-R10 single board computer	
1 x ATA66 flat cable (P/N: 32200-000052-RS)	
1 x RS-232/422/485 cable with bracket (P/N: 19800-000082-RS)	
1 x SATA power cable (P/N: 32102-000100-200-RS)	
1 x KB/MS Y cable (P/N: 32006-000300-100-RS)	1 x USB cable (P/N: CB-USB02-RS)
2 x SATA cable (P/N: 32000-062800-RS)	1 x Mini jumper pack
1 x Utility CD	1 x QIG

Ordering Information

Part No.	Description
IOWA-8522-R10	Half Size ISA CPU card with Intel® Pentium® M / Celeron® M at 400 MHz FSB, LVDS/CRT for dual display, LAN, SATA with RAID, USB 2.0
IOWA-8522-1GZ-R10	Half Size ISA CPU card with Intel® Celeron M 1GHz / Zero Cache, LVDS/CRT for dual display, LAN, SATA with RAID, USB 2.0
IOWA-8522-600-R10	Half Size ISA CPU card with Intel® Celeron® M 600MHz / 512 K cache, LVDS/CRT for dual display, LAN, SATA with RAID, USB 2.0
AC-KIT08R-R10	5.1 channel audio kit with realtek ALC655 AC'97 Codec
19800-000400-100-RS	LPT cable
32200-000017-RS	FDD cable
19800-000075-RS	KB/MS cable with bracket
CF-479B-RS	CPU cooler

IOWA–MARK–R11

Half-size ISA CPU card supports VIA MARK and comes with VGA, LVDS, TTL, LAN, audio and 128 MB of on-board memory

LPT | 18-bit dual channel LVDS | FDD | IDE

Audio
VGA
LAN
COM
KB/MS
Fanless
One Key Recovery iEi symantec.

TTL | LVDS | 4 x USB 1.1

On-board 128 MB Memory
CF Type II
Solder Side

20mm
VIA MARK 800/533 MHz fanless CPU cooler

Features

1. ISA CPU card with a 533 MHz or 800 MHz VIA MARK processor
2. One 168-pin 512 MB (max.) PC133/100 SDRAM DIMM supported
3. Supports VGA, 24-bit TTL/ 18-bit dual channer LVDS
4. Two RS-232, four USB, 1.1
5. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

◆ **CPU**
On-board 533 MHz or 800 MHz VIA MARK processor
◆ **System Chipset**
VIA MARK + VT82C686B
◆ **BIOS**
Award BIOS
◆ **System Memory**
On-board 128MB SDRAM
One 168-pin 512 MB (max.) PC133/100 SDRAM DIMM supported
◆ **Ethernet**
10/100Mbps Realtek RTL8100C Ethernet chipset
◆ **I/O Interface**
4 x USB 1.1   1 x IDE
1 x FDD   1 x LPT
1 x Infrared   2 x RS-232
1 x Keyboard and mouse (PS/2)
1 x 6-pin header for keyboard and mouse
1 x CF Type II
◆ **Audio**
Realtek ALC655 with AC'97 codec
◆ **Digital I/O**
8-bit digital I/O, 4-bit input/ 4-bit output

◆ **Display Interface**
VGA integrated in the VIA MARK 24 bits TTL 18-bit dual-channel LVDS
◆ **Watchdog Timer**
Software programmable supports 1~255 sec. system reset , by ICP6629
◆ **Power Supply**
5 V only, AT and ATX support
◆ **Power Consumption**
5 V @ 2.99 A, 12 V @ 0.09 A running an on-board 800 MHz 128 MB VIA MARK processor with 128 MB of PC133 memory
5 V @ 2.81 A, 12 V @ 0.04 A running an on-board 533 MHz 128 MB VIA MARK processor with 128 MB of PC133 memory
◆ **Temperature**
Operating: 0°C ~ 60°C (32°F~140°F)
◆ **Humidity**
Operating: 5% ~ 95% non-condensing
◆ **Dimensions**
185 mm x 122 mm
◆ **Weight**
GW: 1.0 kg

Packing List

1 x IOWA-MARK single board computer	
1 x ATA66 flat cable (P/N: 32200-000052-RS)	
1 x Single RS-232 cable (P/N: 19800-000047-RS)	
1 x Audio cable (P/N: 19800-000111-RS)	
1 x KB/MS Y cable (P/N: 32006-000300-100-RS)	
1 x USB cable (P/N: CB-USB02-RS)	1 x Mini jumper pack
1 x Utility CD	1 x QIG

Ordering Information

Part No.	Description
IOWA-MARK-533-128MB-R11	ISA CPU card VIA MARK 533 MHz, VGA/ LVDS/TTL, LAN, Audio with on-board 128 MB memory
IOWA-MARK-800-128MB-R11	ISA CPU card VIA MARK 800 MHz, VGA/ LVDS/TTL, LAN, Audio with on-board 128 MB memory
32200-000017-RS	FDD cable
19800-000400-100-RS	LPT cable

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1 Industrial Computing Solutions
2 Video Capture Solutions
3 Embedded Computing Solutions
4 Industrial Data Collector and Controller
5 Panel Solutions Introduction
6 ORing Network Communication
7 Power Supply/ Peripherals