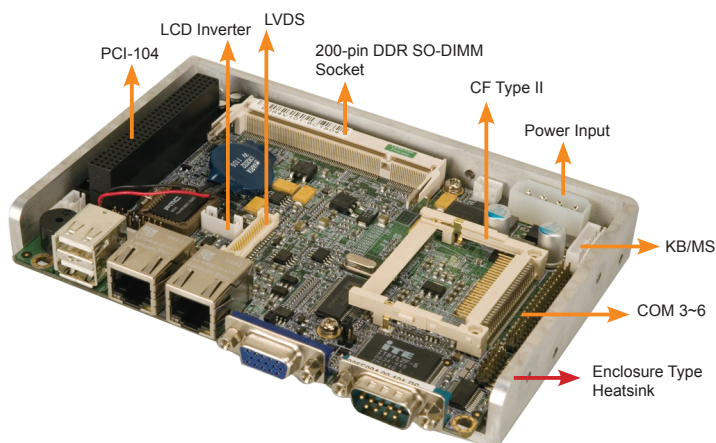
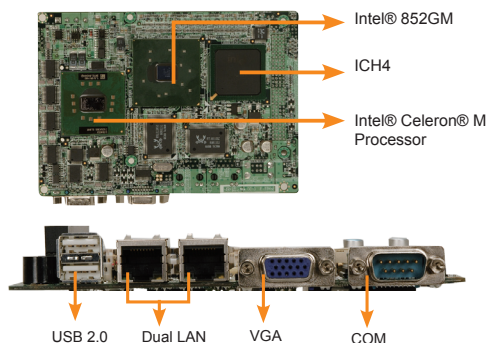


# WAFER-8522

3.5" SBC with ULV Intel® Celeron® M CPU with VGA/LVDS, Dual GbE, USB 2.0 and Audio



### Solder Side



On-board TPM 1.2

### Features

1. Fully compatible with TCG v1.2 Specifications.
2. Sinosun 8-bits CPU Core.
3. Embedded 16KB secure data FLASH memory and 16KB RAM
4. 128KB program FLASH memory supporting online update of Firmware.
5. RSA engine supports up to 2048 bits RSA algorithm.
6. Embedded SHA-1 algorithm engine.

## Specifications

- ◆ **CPU**  
On-board Intel® Celeron® M 600MHz 512K cache / 1.0GHz zero cache Processor
- ◆ **System Chipset**  
Intel® 852GM + ICH4
- ◆ **BIOS**  
AMI BIOS
- ◆ **System Memory**  
1 x 200-pin Signal channel DDR266 SO-DIMM up to 1GB
- ◆ **Ethernet**  
Dual Realtek RTL8110SC GbE chipsets
- ◆ **I/O Interface**  
5 x RS-232  
1 x RS-232/422/485  
4 x USB 2.0  
1 x IDE  
1 x PS/2 for KB/MS  
1 x TPM V1.2 module on-board (SINOSUN SSX35)
- ◆ **Expansions**  
PCI-104 (PCI Bus)
- ◆ **IrDA**  
1 x IrDA by pin header
- ◆ **Super I/O**  
ITE IT8712F
- ◆ **Display Interface**  
VGA integrated in Intel® 852GM  
18-bit dual channel LVDS
- ◆ **Audio**  
Realtek ALC655 with AC'97 codec
- ◆ **SSD**  
CF Type II
- ◆ **Watchdog Timer**  
Software programmable supports 1 ~255 sec. system reset
- ◆ **Power Supply**  
AT/ATX support
- ◆ **Power Consumption**  
5V@3.43A, 12V@0.13A  
(Celeron® M 1GHz/ 400MHz CPU with 1GB 400MHz DDR)
- ◆ **Temperature**  
Operation: 0°C ~ 60°C (32°F ~ 140°F)
- ◆ **Humidity**  
Operation: 5% ~95% non-condensing
- ◆ **Dimensions**  
146mm x 102mm
- ◆ **Weight**  
GW: 700g / NW: 175g



## Features

1. 3.5" form factor with ULV Intel® Celeron® M CPU
2. CPU and chipset on the solder side easy for system thermal solution
3. DDR 266MHz SO-DIMM up to 1GB
4. VGA, 18-bit dual channel LVDS
5. TPM V1.2 hardware security function supported
6. CF Type II, USB 2.0, 6 x RS-232 and Audio

## Packing List

1 x WAFER-8522 Single Board Computer
1 x IDE Flat Cable 44p/44p (P/N: 32200-000009-RS)
1 x 4 RS-232 Adapter Cable (P/N: 32200-025401-RS)
1 x PS/2 Keyboard/Mouse Cable (P/N: 32000-043301-RS)
1 x Audio Cable (P/N: 32200-072100-RS)
1 x Enclosure Heatsink
1 x Mini Jumper Pack
1 x Utility CD
1 x QIG (Quick Installation Guide)

## Ordering Information

Part No.	Description
WAFER-8522-1GZ-R10	3.5" SBC with ULV Intel® Celeron® 1GHz Zero Cache CPU with VGA/LVDS, Dual GbE, USB 2.0 and Audio
WAFER-8522-600-R10	3.5" SBC with ULV Intel® Celeron® 600MHz 512K Cache CPU with VGA/LVDS, Dual GbE, USB 2.0 and Audio
WAFER-8522T-1GZ-R10	3.5" SBC with ULV Intel® Celeron® 1GHz Zero Cache CPU with VGA/LVDS, Dual GbE, USB 2.0, Audio and TPM
WAFER-8522T-600-R10	3.5" SBC with ULV Intel® Celeron® 600MHz 512K Cache CPU with VGA/LVDS, Dual GbE, USB 2.0, Audio and TPM
32200-000077-RS	RS-232/422/485 Cable
32000-070300-RS	USB Cable
IO-KIT-4COM-R10	4 COM Ports Adapter Board

# Enclosure Heatsink

**Old Way**

**OLD STYLE**

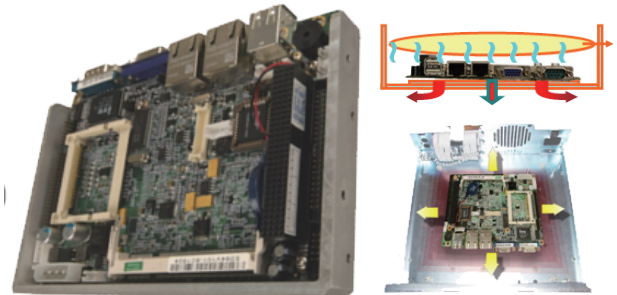
Heat from CPU board is circling in the system. Accumulation heat occurs the unstable system !!!

**New Way**

**UPGRADE NOW!**

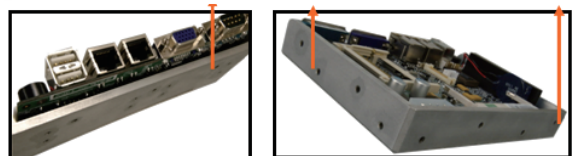
Most of heat will be spread out by whole system surface !!!

**iEi Technology Corp.**



IEI Enclosure Type Heatsink design, the heatsink housing is included in the standard packing list.

Flexibility screw mounting holes for all directional thermal solutions.



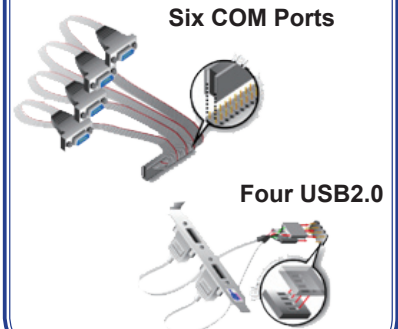
## On-board TPM 1.2



1. Protection of authentication credentials by binding them to platform
2. Hardware protection of authentication data



## Complete I/O



## Dimensions

### Enclosure Heatsink Included

