# 104-1623CLDN
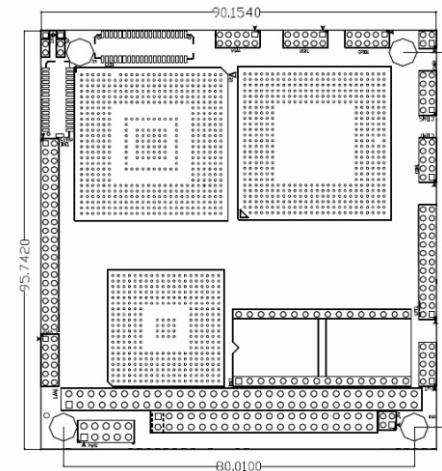
**P3 Series SBC with CPU and Memory/LVDS/VGA/LCD/SSD/LAN**



COM2  COM1  LPT  KB/MS + FP
GPIO  DOC
USB  PC/104
VGA
LCD
+5V DC-IN
Lvds  IDE  LAN



CE  Wide Temperature  intel
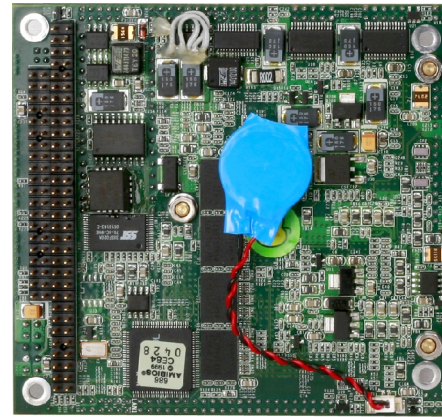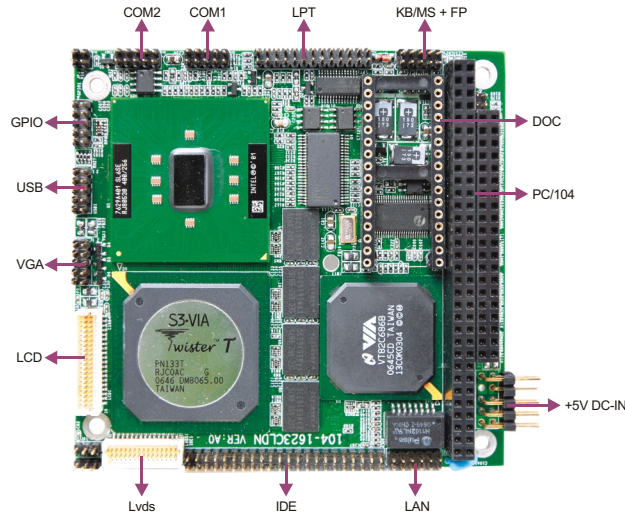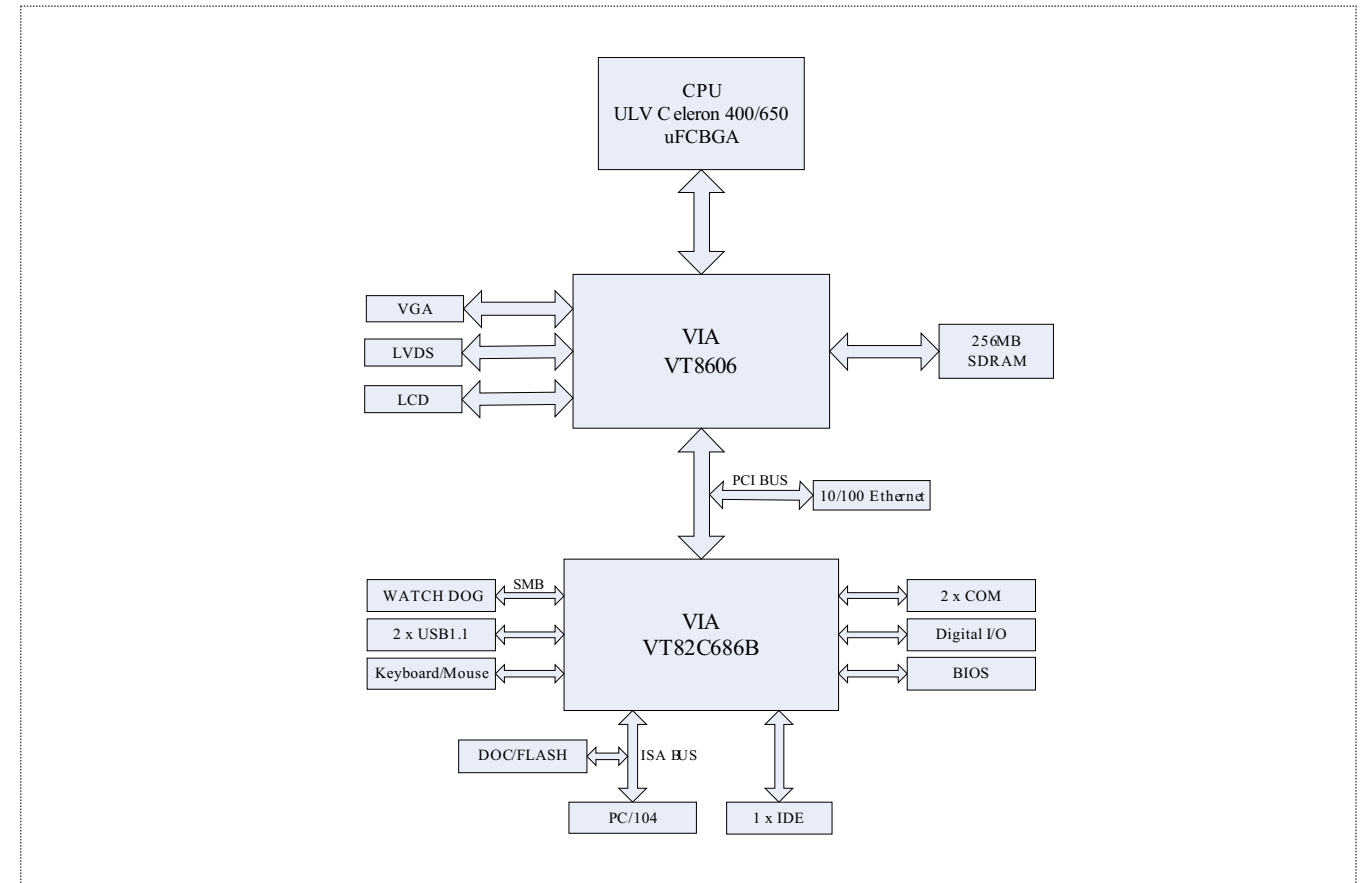
## Features

- Supports Intel® ULV Celeron® 400MHz processor (650MHz optional)
- Onboard 256MB SDRAM
- One 10/100Mbps Ethernet controller
- Supports VGA and LCD, 18/24-bit TFT LVDS
- PC/104 expansion bus
- 8-channel digital input and digital output
- Two serial ports, one parallel port, two USB ports

## Specifications

### System

| | |
|---|---|
| Processor | Onboard Intel® ULV Celeron® 400MHz processor (650MHz optional) |
| Chipset | VIA Twister chipset, VT8606+VT82C686B, supporting 60/100/133MHz FSB |
| Memory | Onboard 256MB SDRAM |
| Watchdog Timer | Software programmable supports 1~255 sec./min. System reset/interrupt |
| Expansion Interface | ISA bus, standard PC/104 bus interface |

### Storage

| | |
|---|---|
| IDE | 1 x 44 pin ATA100/66 IDE interface, supporting 2 x IDE device |
| DOC | 1 x DOC/Flash socket |

### I/O Interface

| | |
|---|---|
| USB | 2 x USB1.1 port, one onboard USB header provides two extra ports |
| Serial Port | 2 x serial port, COM2 supports RS-232/485 |
| Parallel Port | 1 x LPT |
| Keyboard/Mouse | 1 x PS/2 |
| GPIO | 4-channel digital input & output TTL level interface |

### Onboard Video

| | |
|---|---|
| Chipset | Integrated Savage4 2D/3D graphics acceleration controller |
| Memory | Shared system memory, 8MB/16MB/32MB |
| Display | Supports VGA and LCD, 18/24-bit TFT LVDS; supports dual-display |

### Ethernet

| | |
|---|---|
| Chipset | 1 x Realtek RTL8139DL Ethernet controller |
| Speed | 10/100Mbps |
| Connector | 1 x LAN port, available interface of 10-Pinheader onboard |

### Mechanical and Environmental

| | |
|---|---|
| Dimensions | 96mm x 90mm |
| Operating Temperature | -40℃~85℃ |
| Operating Humidity | 5%-95%,non-condensing |

### Power

| | |
|---|---|
| Power Supply | +5V single power supply |
| Power Consumption | Typical 9.8W (Intel ULV Celeron 400Mhz, 256MB memory) |

### Operating System

| | |
|---|---|
| Windows OS | Windows NT 4.0/Windows 98SE/ Windows 2000/ Windows XP |
| Embedded OS | Linux/XP Embedded |

## Board Diagram



CPU ULV Celeron 400/650 uFCBGA
VGA
LVDS
LCD
VIA VT8606
256MB SDRAM
PCI BUS
10/100 Ethernet
WATCH DOG
2 x USB1.1
Keyboard/Mouse
SMB
VIA VT82C686B
2 x COM
Digital I/O
BIOS
DOC/FLASH
ISA BUS
PC/104
1 x IDE

## Available Accessories

| Part Number | Name | Description | Qty. |
|---|---|---|---|
| 2192-003591 | Driver CD/Pressed film/RoHS | 104-1623CLDN/VER:A0 | 1 |
| 2330-000011 | Jumper/RoHS | 2.0mm pitch | 7 |
| 2360-008781 | HDD cable/RoHS | 40-pin to 44-pin (2.0mm pitch), length: 550mm/RoHS | 1 |
| 2360-011221 | Parallel port cable/RoHS | DB25 connector to 26-pin (2x13) connector (2.0mm pitch), length: 300mm/RoHS | 1 |
| 2360-011231 | Serial port cable/RoHS | DB9 connector to 10-pin (2x5) connector (2.0mm pitch), length: 300mm/RoHS | 2 |
| 2360-012641 | VGA cable/RoHS | VGA connector to 10-pin (2x5) connector (2.0mm pitch), length: 300mm/RoHS | 1 |
| 2360-012651 | Power cable/RoHS | One male power 4-pin (5.08mm pitch) connector to 10-pin (2x5), length: 250mm/RoHS | 1 |
| 2360-014781 | Dual USB ports with bracket/RoHS | Two USB ports to one 10-pin (2x5) connector (2.0mm pitch), length: 550mm/RoHS | 1 |
| 2360-017471 | Parallel flat cable/RoHS | Two ports 2x6-pin connector (2.0mm pitch), length: 250mm | 1 |
| 2360-017481 | Multi-functional Conversion cable/RoHS | Buzzer reset button dual PS 2 connectors to 2x5-pin 2.0mm pitch female connector, length: 250mm | 1 |
| 2412-000311 | Setup Guide/RoHS | AMI/BIOS Setup Guide (for CORE/7) former/VER: A0 | 1 |
| 2413-005551 | User's Manual/Chinese/RoHS | 104-1623CLDN/VER: A2 | 1 |

## Ordering Information

| Part Number | Model Number | Description |
|---|---|---|
| 0030-001010 | 104-1623CLDN | Motherboard |
| 0030-010451 | 104-1623CLDN/TB/Conformal coating | Motherboard/RoHS/TB/Conformal coating |
| 0030-004400 | 104-1623CLDN/Conformal coating | Motherboard/Conformal coating |