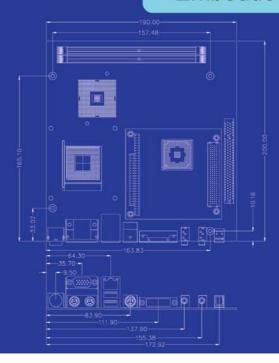
# **Embedded Solution**





# FI855A

# Intel Pentium M TWIN-VIEW / LVDS / 4 COM Ports / PC 104 Plus / Mini PCI

### Processor

- . Optimized for Intel Pentium M -Dothan processor
- . 478-pin micro FC-PGA or 479-ball micro FC-BGA package
- . Intel Pentium M CPU is offered 1.3/1.4/1.5/1.6/1.7GHz
- . Low Voltage Intel Pentium M CPU is offered 1.1/1.2/1.3GHz
- . Ultra Low Voltage Intel Pentium M CPU is offered 900M/1.0/1.1GHz
- . Supports Intel Architecture with Dynamic Execution
- . 400MHz, source-synchronous FSB

## Options select

- . 478-pin micro FC-PGA for 479-pin Intel Pentium M processor Socket
- . 479-ball micro FC-BGA on board package

### Chipset list

Intel Mobile Chipset Intel 855GME and Intel 82801DB ICH4 System Chipset list:

- . MB chipset: Intel 855GME and Intel 82801DB ICH4
- . VGA chipset: Intel 855GME Integrated Graphics chipset
- . Sound Chipset: Realtek ALC 650 C97 2.3 SOUND
- . LAN: Intel 82540EM/82541GI/Realtek RTL8100C/RTL8110SB three type optional.
- . I/O: ITE IT8712F and Fintek F81216D IO
- . TV/DVI chipset: Chrontel CH7009 for DVI and SDTV or Chrontel CH7015 SDTV/HDTV

## Memory

- . Supports two double-sided DIMM with un-buffered PC
- 1600/2100 DDR-SDRAM(with or without ECC)
- . Supports 64Mbit,128Mbit,256Mbit,512Mbite for x 8 and x 16 width devices
- . Maximum of 2Gbytes of system by using 512Mbit devices(double sided)
- . Supports 200MHz and 266MHz DDR devices
- . 64-bit data interface(72-bit with ECC)
- . Supports up to simultaneous open pages

## Graphic / Video

- . Internal Graphics Memory Up to 64MB of dynamic video memory allocation
- . Display/render frequency up to 250 MHz
- . 3DvSetup and render engine, Zone rendering, High-quality performance texture engine . 350MHz integrated 24-bit RAMDAC, Hardware color cursor support.
- . Accompanying I2C and DDC channels provided through multiplexed interface.
- . Dual independent pipe for dual independent display
- . Simultaneous: Same images and native display timings on each display device.
- . Improved hardware motion compensation for MPEG2, all format decoder
- (18 ATSC formats) supported, Dynamic Bob and Weave support video streams.
- Software DVD at 60 Fields/second and 30 frames / second full screen

. Digital Video Out Port DVO support 12bit interface, AGP4x compliant with DVI specification 1.5

## TV OUT/ DVI ports (SDTV and DVI by Option 1 Chrontel CH7009)

## TV OUT (SDTV and HDTV by Option 2 Chrontel CH7015)

## LVDS Interface

- . Single or dual channel LVDS panel support up to UXGA panel with
- frequency range from 25MHz to 112MHz per channel
- . Supports data format of 18 bit LVDS interface
- . Digital Video Out Port DVO support 12bit interface, AGP4x compliant with **DVI specification 1.5**

## **PCI Bus Master IDE**

- . Supports "Native Mode" register and interrupts.
- . Independent timing of up to 4 drives, with separate primary and secondary
- IDE cable and secondary IDE cable connectors . Ultra ATA 100/66/33,BMIDE and PIO modes
- . Tri-state modes to enable swap bay.
- . Two 40pin 2.54mm and One 44pin 2.0mm two type connectors.
- . Support Compact Flash card type II for ATA interface.

## Audio

- . AC-Link for Audio CODEC
- . Supports AC'97 2.3
- . Support for up to six or two channels of PCM audio out (full AC3 decode)
- . CD-in / Mic-in / Line-in /S/PDIF out support
- . Provide two channels Audio Amplify about 2 Watt / 8 Ohm speaker

### USB

- . Includes three UHCI host controllers that support six external ports
- . Includes one EHCI high-speed USB 2.0 Host Controller that supports all six ports
- . Supports Legacy keyboard / mouse software.

- . LPC (Low Pin Count) Interface
- . Supports Hardware Monitor Controller
- . Four ports 16C550 UARTs RS232 or Three ports RS232 and one port RS232/RS422/RS485
- . Supports IrDA 1.0 / ASKIR protocols
- . One FDC Interface for slim type FDD
- LAN (Default Option 1 for Realtek 10/100Mb )

LAN (Option 2 for Realtek 10/100/Giga bit )

## LAN (Option 3 for Intel 10/100/Giga bit )

## DIO and WDT function

- . Hardware Watch Dog Timer support can programmable 0-255 sec
- . Hardware Digital Input Output provide 4 input and 4 output

- **Expend Interface**
- . One expend PCI rev:2.2 interface(Depend on PCI Riser Card can support max 2 PCI slots function) . PC-104 Plus bus connector for 32bit PCI bus Maximum can expend to four PC 104 Plus card .
- One Mini PCI socket for PCI rev:2.2 interface.

## Others function

. One Compact Flash Card Reader for IDE BUS ATA type II spec

. On board power DC 15-20V input

## Front Connector Header

- . One power switch for power on
- . One power LED . One HDD LED
- One LAN LED

## **Back Panel Connectors**

- . One DC 19V in power mini pin jack
- . One DB-15PIN VGA and PS2 Keyboard and
- . Two USB and One RJ45 LAN port
- . One S-Video
- . One DVI D-sub connector
- . One Audio Jack for MIC-in
- . One Audio Jack for Speak-out
- . One SPDIF-out

## BIOS

- . Award BIOS version 6.1
- . Support DMI 2.0 function
- . ACPI v1.0 compliant
- . APM v1.2 compliant
- Windows 9x/ME/2000 Plug and play BIOS

# Temperature

. Operating 0~60 C Dimension

## . 190 x 200 mm

- PC104 Plus Card
- .4 x Lan . 4 x Video-in . 2 x PCMCIA
- www.lex.com.tw

