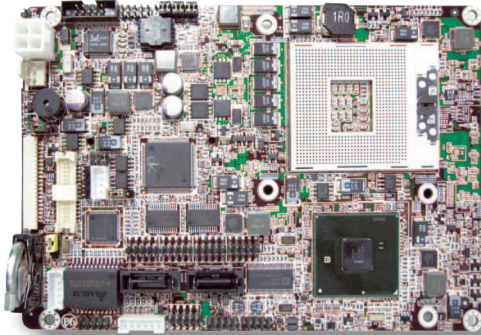


# EmCORE-i55M0

1<sup>st</sup> Generation Intel® Core™ i5/i7/Celeron® Processor 3.5" Compact Board



## Features

- Intel® Core™ i5/i7 and Celeron® Mobile Processor supported
- Integrated Gigabit Ethernet
- Dual Channels 24-bit LVDS, and Analog RGB
- Dual Independent Displays supported
- RS-485 Auto-Flow Control supported
- **Extended Operating Temp.: -20 ~ 70°C**

## System

CPU	1 <sup>st</sup> Generation Intel® Core™ i5/i7 and Celeron® Mobile Processor in rPGA988 socket
Memory	1 x 204-pin DDR3 SO-DIMM socket, supporting 800/1066MHz SDRAM up to 4GB
Chipset	Intel® PCH HM55
BIOS	AMI PnP Flash BIOS
Watchdog Timer	1~255 levels reset

## I/O

I/O Chip	Fintek F71869ED
Serial Port	4 x COM ports (3 x RS-232, 1 x RS-232/422/485 selectable)
USB Port	4 x USB 2.0 ports
KB/MS	1 x 6-pin wafer connector for keyboard and mouse (PS/2 interface via Y-cable)
Expansion Bus	LPC (Low Pin Count) Connector
Storage	2 x Serial ATA ports with 300MB/s HDD transfer rate 1 x CFast socket
Ethernet Chipset	1 x Intel® 82583V PCIe GbE controller
Audio	Realtek ALC662 5.1 channel HD Audio Codec, Mic-in/Line-in/Line-out

## Display

Graphic Chipset	Integrated Intel® HD Graphics Controller w/ 5th generation graphic core Analog RGB that supports resolution up to 2048 x 1536 @60Hz
Graphic Interface	LCD: Dual Channels 24-bit LVDS, resolution up to 1600 x 1200 DisplayPort supported

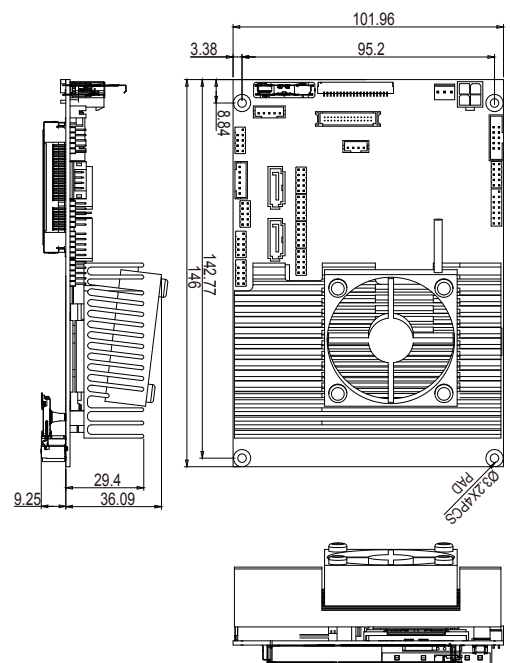
## Recommended CPU list:

Intel® i7-620M 2.66GHz Core™ 2 Duo Processor  
Intel® i5-520M 2.4GHz Core™ 2 Duo Processor  
P4500 1.86GHz Celeron® Processor

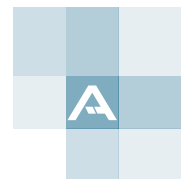
## Mechanical & Environmental

Power Requirement	+12V input
Power Consumption	2.81A@+12V with Intel® i5 520M (Typical)
Operating Temp.	-20 ~ 70°C (-4 ~ 158°F)
Storage Temp.	-40 ~ 80°C (-40 ~ 176°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Dimensions (L x W)	146 x 102 mm (5.7" x 4")

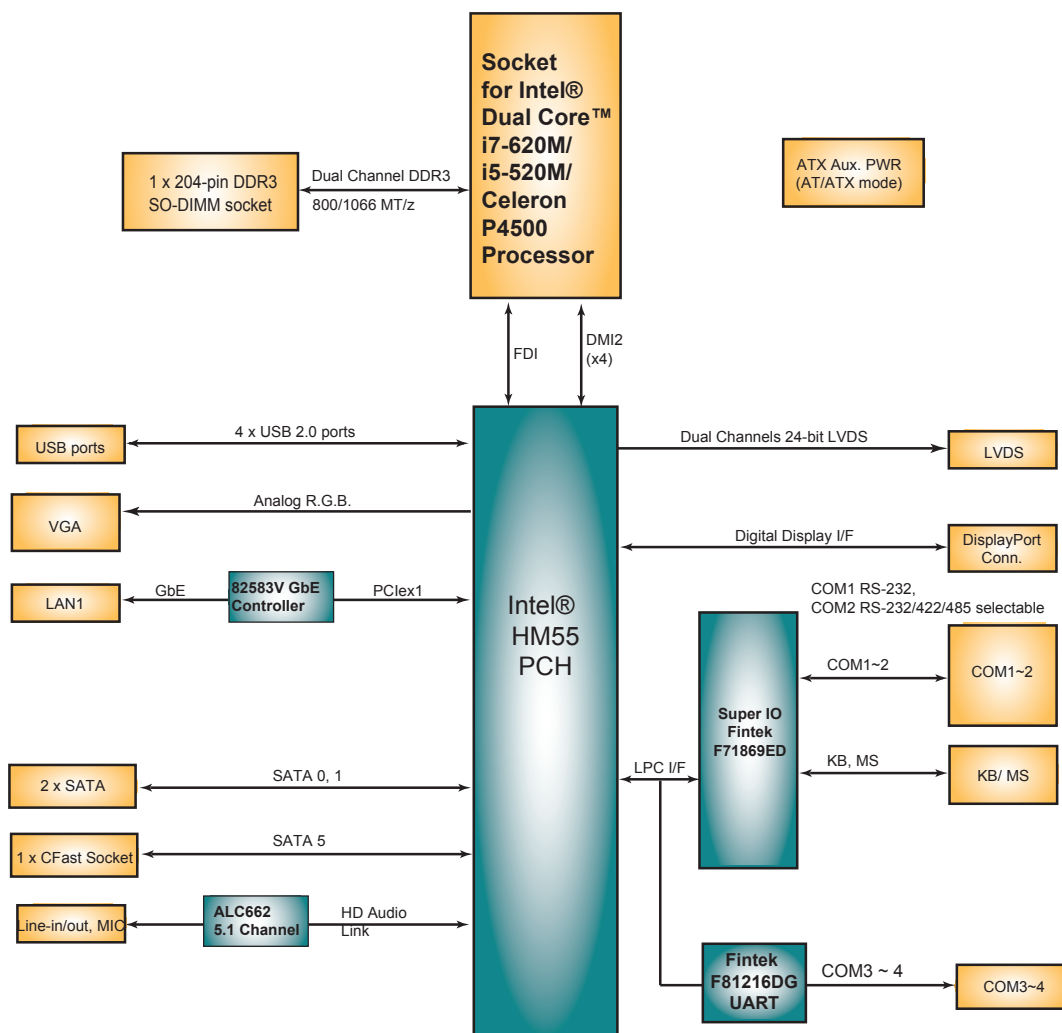
## Dimensions



Unit:mm



## Block Diagram



## Ordering Information

EmCORE-i55M0      Socket-G Intel® 3.5" Compact Board

## Optional Accessories

FCDB-1424      DisplayPort daughterboard

FCDB-349R      16-bit digital I/O board

CBK-12-55M0-00      Cable kit  
 2 x USB cables  
 1 x Audio cable  
 1 x KB & MS Y-cable  
 2 x SATA cables  
 1 x VGA cable  
 1 x GbE Ethernet cable  
 1 x COM-port cable