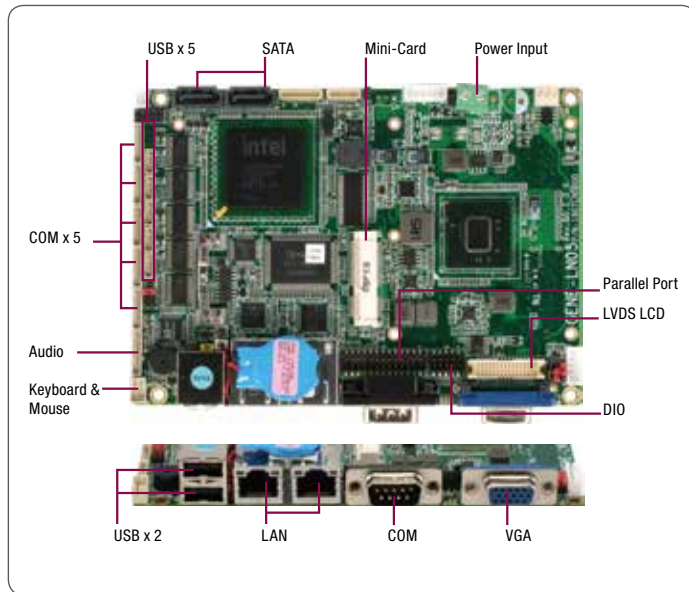


# GENE-LN05 Rev. B

3.5" SubCompact Board With Intel® Atom™ N455/ D525 Processor

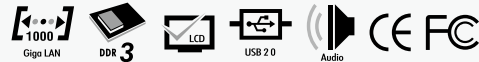


## Features

- Intel® Atom™ N455/D525 Processor
- Intel® ICH8M
- DDR3 800 MHz SODIMM, Up to 4 GB For Intel® Atom™ D525  
DDR3 800 MHz SODIMM, Up to 2 GB For Intel® Atom™ N455
- Gigabit Ethernet x 2, RJ-45 x 2
- CRT, 18/24-bit Single Channel LVDS LCD
- 2CH HD Audio
- SATA 3.0 Gb/s x 2 (Optional RAID 0 & 1), CompactFlash™ x 1
- USB2.0 x 7, COM x 6, Parallel x 1, 8-bit Digital I/O
- Onboard 4/5/8-wire Resistive Touch Screen Controller
- Mini-Card x 1
- +12V or +5V (Optional)
- Onboard Trusted Platform Module (Optional)

## Specifications

System	
Form Factor	3.5"
Processor	Intel® Atom™ N455/D525 1.8 GHz Processor
System Memory	204-pin DDR3 800 MHz SODIMM x 1, up to 4 GB for Intel® Atom™ D525 204-pin DDR3 800 MHz SODIMM x 1, up to 2 GB for Intel® Atom™ N455
Chipset	Intel® ICH8M
I/O Chipset	Nuvoton W83627DHG-P, Fintek F81216DG
Ethernet	Intel® 82567V & 82583V, 10/100/1000Base-TX, RJ-45 x 2
BIOS	AMI Plug & Play SPI BIOS - 2 MB Flash
Wake on LAN	Yes
Watchdog Timer	Generates a time-out system reset
H/W Status Monitoring	Supports power supply voltages and temperature monitoring
Expansion Interface	Mini-Card x 1, LPC bus
Trusted Platform Module (TPM)	Infineon SLB 9635 TT 1.2 (Optional)
Battery	Lithium battery
Power Requirement	+12V or +5V (optional), AT/ATX
Power Consumption (Typical)	Intel® Atom™ D525, DDR3 1 GB 1.29A@+12V
Board Size	5.75"(L) x 4"(W) (146mm x 101.6mm)
Gross Weight	0.88 lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	66,000
Display	
Chipset	Intel® N455/D525 integrated
Memory	Shared system memory up to 224 MB/DVMT 4.0
Resolutions	Up to 1920 x 1440 for CRT (D525) Up to 1280 x 1024 for CRT (N455) Up to 1366 x 768 or 1280 x 800 for LCD
LCD Interface	18/24-bit single channel LVDS LCD
I/O	
Storage	SATA 3.0 Gb/s x 2, CompactFlash™ x 1
Serial Port	RS-232 x 5, RS-232/422/485 (auto flow) x 1
Parallel Port	SPP/EPP/ECP x 1
USB	USB2.0 x 7
PS/2 Port	Keyboard x 1, Mouse x 1
Digital I/O	Supports 8-bit (Programmable)
Audio	Line-in, Line-out, Mic-in
Touch Screen	Supports 4/5/8-wire resistive touch screen



## Packing List

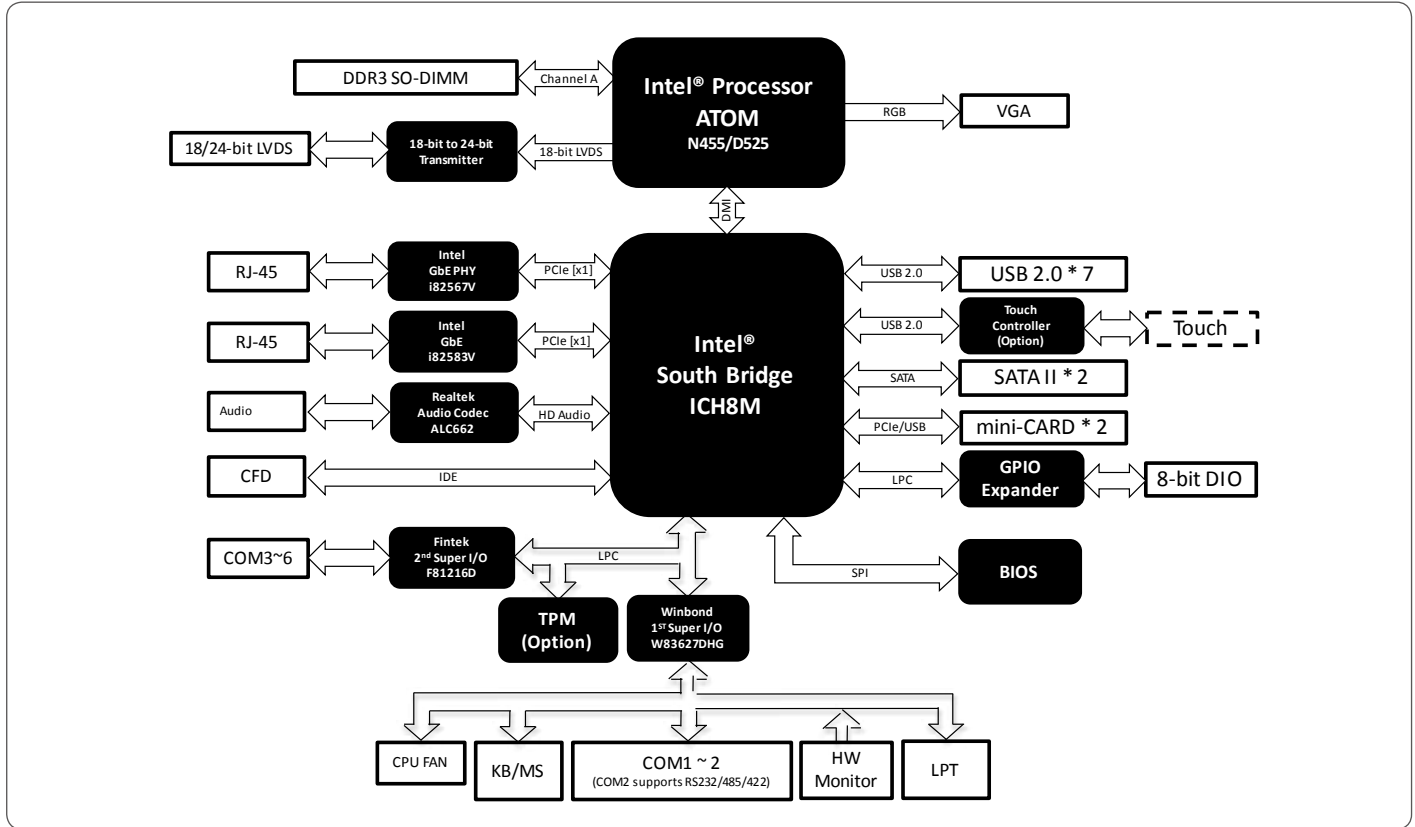
- Product CD
- GENE-LN05 Rev.B with Active Cooler (D525 Version) or with Passive Heatsink (N455 Version)

## Optional Accessories

- 1700050207  
USB Cable, Length 20cm
- 1701090150  
COM Port Cable, Length 15cm
- 1709100254  
Audio Cable, Length 25cm
- 1709070500  
SATA Cable, Length 50cm
- 1701260200  
Parallel Port Cable, Length 20cm
- 1702002010  
Big Single Row 4-pin Power Input Cable for +12V Input, Length 10cm
- 1702150155  
Power Cable for 2.5" SATA Hard Disk, Length 15cm
- 170220020B  
Conversion Cable ATX Power Supply, Length 20cm
- 170204010P  
Big Single Row 4-pin Power Input Cable for +5V Input, Length 10cm
- 1700060157  
KB/Mouse Cable

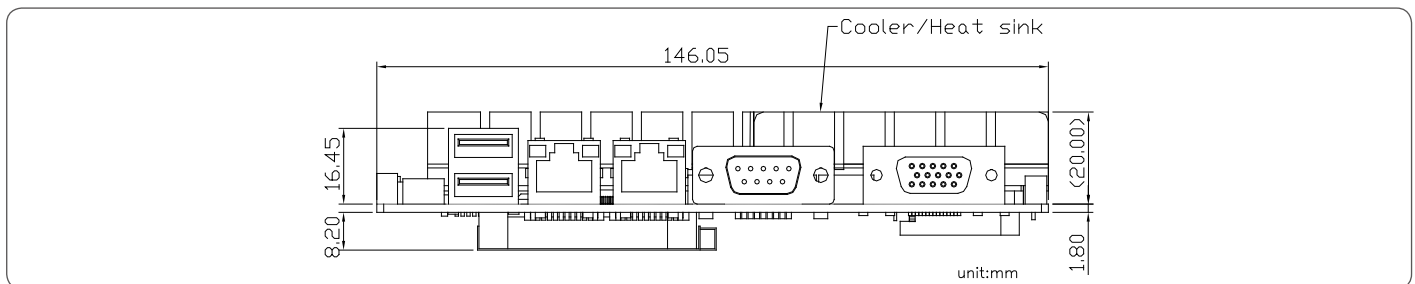
# GENE-LN05 Rev. B

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Chipset	Fan/ Fanless	Display	LVDS	Storage	LAN	USB	RS- 232	RS- 232/422/485	Expansion Slot	Power	Power Temp	Others
TF-GENE-LN05-B10	Intel® Atom™ D525	ICH8M	Fan	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	2	Mini-Card x 1	+12V, AT/ATX	0°C ~ 60°C	Touch Controller, SIM, DIO x 8
TF-GENE-LN05-B10-01	Intel® Atom™ N455	ICH8M	Fanless	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	1	Mini-Card x 1	+12V, AT/ATX	0°C ~ 60°C	Touch Controller, SIM, DIO x 8
TF-GENE-LN05-B10-02	Intel® Atom™ N455	ICH8M	Fanless	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	1	Mini-Card x 1	+5V, AT/ATX	0°C ~ 60°C	Touch Controller, SIM, DIO x 8
TF-GENE-LN05-B10-03	Intel® Atom™ D525	ICH8M	Fanl	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	1	Mini-Card x 1	+5V, AT/ATX	0°C ~ 60°C	Touch Controller, SIM, DIO x 8
TF-GENE-LN05W1-B10-01	Intel® Atom™ N455	ICH8M	Fanless	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	1	Mini-Card x 1	+12V, AT/ATX	WITAS 1 (-20°C ~ 70°C)	DIO x 8
TF-GENE-LN05W2-B10-01	Intel® Atom™ N455	ICH8M	Fanless	CRT + LVDS	18/24b, 2CH	SATA x 2 CompactFlash™ x 1	GbE x 2	UBS2.0 x 7	5	1	Mini-Card x 1	+12V, AT/ATX	WITAS 2 (-40°C ~ 85°C)	DIO x 8