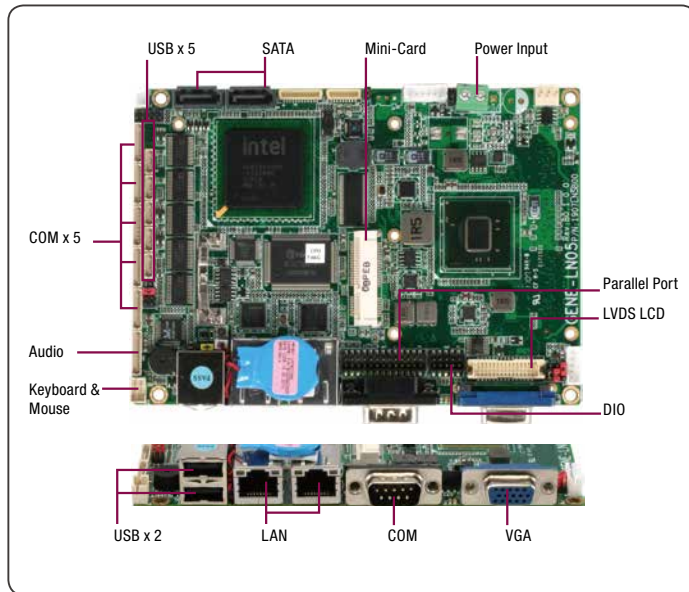


# 03 GENE-LN05 Rev. B

SubCompact Boards

## 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" SubCompact Board
CPU	Intel® Atom™ D525/N455
CPU Frequency	1.8 GHz
Chipset	Intel® ICH8M
Memory Type	SODIMM DDR3 800
Max. Memory Capacity	4 GB for D525 , 2GB for N455
BIOS	AMI 4MB
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V or +5V
Power Supply Type	AT/ATX
Power Consumption (Typical)	Intel® Atom™ D525, DDR3 800 1 GB , 1.29A @ +12V
Dimension (L x W)	5.75" x 4" (146mm x 101.6mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	70,000
Certification	CE/FCC
Display	
VGA/LCD Controller	Intel® Atom™ D525/N455
Video Output	CRT, LVDS
Backlight inverter supply	Up to 24-bit single channel LVDS
I/O	
Ethernet	10/100/1000Base-TX x 2, Intel® 82567V, Intel® 82583V
Audio	High definition audio interface
USB Port	USB2.0 x 7
Serial Port	RS-232 x 5, RS-232/422/485 x 1
Parallel Port	SPP/ECP/EPP x 1
HDD Interface	SATA 2 x 2
FDD Interface	—
SSD	CompactFlash™
Expansion Slot	Mini-Card x 1
DIO	8 bit
SIM	x 1
TPM	x 1
Touch	x 1



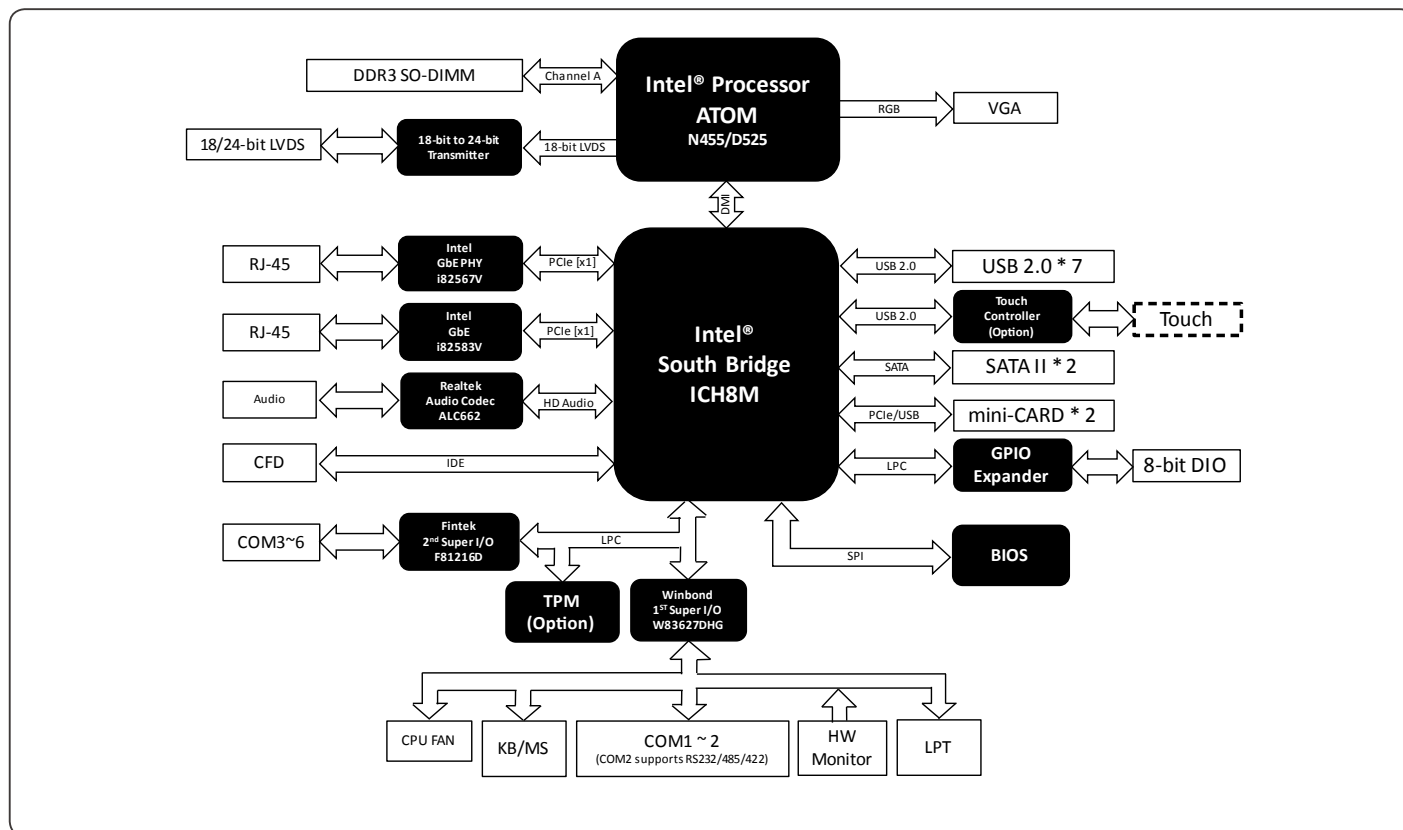
### Packing List

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

### Optional Accessories

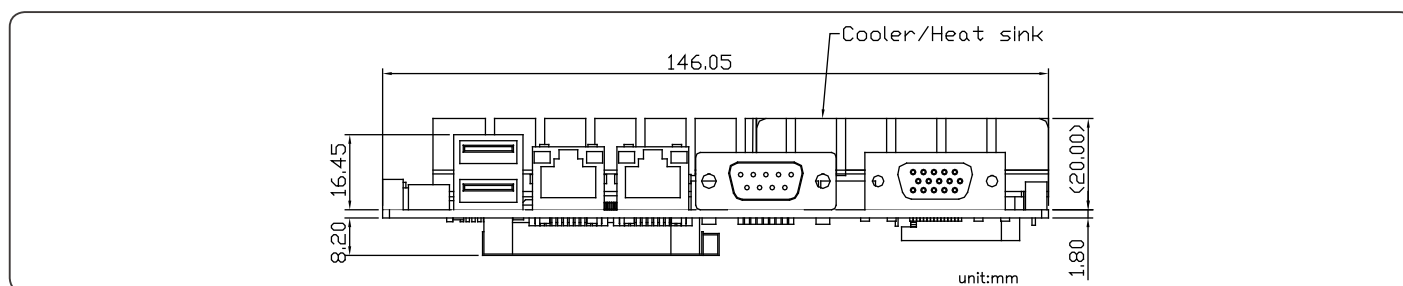
- **1700050207**  
USB Cable, Length 20cm
- **1701090150**  
COM Port Cable, Length 15cm
- **1709100254**  
Audio Cable, Length 25cm
- **1709070500**  
SATA Cable, Length 50cm
- **1701260200**  
Parallel Port Cable, Length 20cm
- **1702002010**  
Big Single Row 4-pin Power Input Cable for +12V Input, 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

## 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	Fan	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