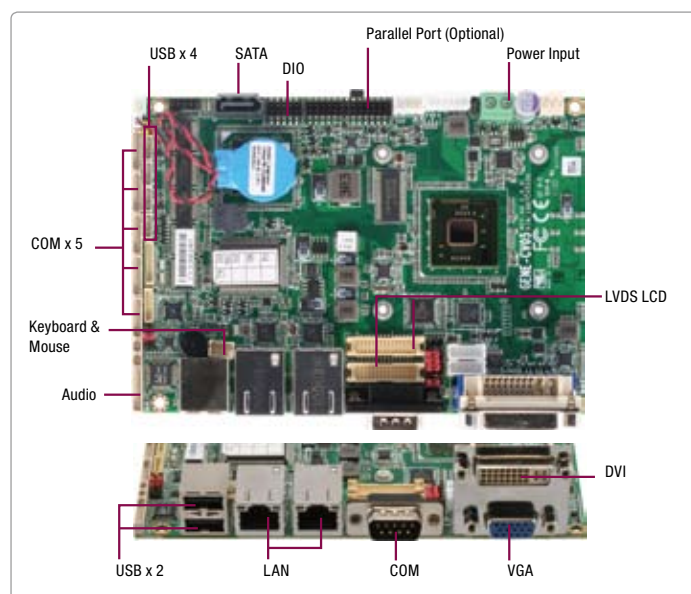


# GENE-CV05

3.5" SubCompact Board With Intel® Atom™ D2700/N2800/N2600 Processor

SubCompact Boards



## Specifications

| System                                                     |                                                                                                                                                                                                           |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                                                | 3.5"                                                                                                                                                                                                      |
| Processor                                                  | Intel® Atom™ D2700/N2800/N2600 Processor                                                                                                                                                                  |
| System Memory                                              | 204-pin DDR3 SODIMM x 1, Max. 4 GB (DDR3 800/1066) for Intel® Atom™ D2700/N2800                                                                                                                           |
|                                                            | 204-pin DDR3 SODIMM x 1, Max. 2 GB (DDR3 800/1066) for Intel® Atom™ N2600                                                                                                                                 |
| Chipset                                                    | Intel® NM10                                                                                                                                                                                               |
| I/O Chipset                                                | ITE 8783                                                                                                                                                                                                  |
| Ethernet                                                   | Realtek RTL8111E, 10/100/1000Base-TX, RJ-45 x 2                                                                                                                                                           |
| BIOS                                                       | AMI Plug & Play SPI BIOS - 32MB 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 AT/ATX                                                                                                                                                                                               |
| Power Consumption (Typical)                                | —                                                                                                                                                                                                         |
| Board Size                                                 | 5.75"(L) x 4"(W) (146mm x 101.6mm)                                                                                                                                                                        |
| Gross Weight                                               | 0.88lb (0.4kg)                                                                                                                                                                                            |
| 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)                                               | —                                                                                                                                                                                                         |
| Display                                                    |                                                                                                                                                                                                           |
| Supports CRT/LCD, DVI/LCD simultaneous/ dual view displays |                                                                                                                                                                                                           |
| Chipset                                                    | Intel® Atom™ D2700/ N2800/ N2600 integrated                                                                                                                                                               |
| Memory                                                     | Shared system memory up to 256MB                                                                                                                                                                          |
| Resolutions                                                | Up to 1920 x 1200 for CRT                                                                                                                                                                                 |
|                                                            | Up to 1366 x 768 for LCD                                                                                                                                                                                  |
| LCD Interface                                              | Dual LVDS LCDs: 24-bit Single Channel LVDS LCD + 18/24-bit Dual-channel LVDS LCD for Intel® Atom™ D2700,<br>18-bit Single Channel LVDS LCD + 18/24-bit Dual-Channel LVDS LCD for Intel® Atom™ N2800/N2600 |

## Features

- Intel® Atom™ D2700/N2800/N2600 Processor
- Intel® NM10
- DDR3 800/1066 SODIMM, Max. 4 GB For Intel® Atom™ D2700/N2800 and Max. 2 GB For Intel® Atom™ N2600
- Gigabit Ethernet x 2
- CRT, 18/24-bit Single Channel LVDS LCD + 18/24-bit Dual-Channel LVDS LCD For Intel® Atom™ D2700 DVI, 18-bit Single Channel LVDS LCD + 18/24-bit Dual-Channel LVDS LCD For Intel® Atom™ N2800/N2600
- 2CH HD Audio + 2W Amplifier
- SATA 3.0Gb/s x 1, CFast™ x 1
- USB2.0 x 6, COM x 6, 8-Bit Digital I/O, Parallel x 1 (Optional)
- Onboard 4/5/8-wire Resistive Touch Screen Controller
- Mini Card x 1
- +12V Only Operation
- Onboard Trusted Platform Module (Optional)
- mSATA x 1 (Optional)



| I/O                  |                                            |
|----------------------|--------------------------------------------|
| Storage              | SATA 3.0Gb/s x 1, CFast™ x 1               |
| Serial Port          | RS-232 x 5, RS-232/422/485 (auto flow) x 1 |
| Parallel Port        | SPP/EPP/ECP x 1 (optional)                 |
| Universal Serial Bus | USB2.0 x 6                                 |
| 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-CV05 with Active Cooler (Intel® Atom™ D2700 Version) or with Passive Heatsink (Intel® Atom™ N2800/N2600 Version)

## Unit: mm



| Part Number         | CPU                | Fan/Fanless | Display                                        | LVDS                         | Storage                | LAN     | USB | RS-232 | RS-232/422/485 | Expansion Slot | Power        | Temp       |
|---------------------|--------------------|-------------|------------------------------------------------|------------------------------|------------------------|---------|-----|--------|----------------|----------------|--------------|------------|
| TF-GENE-CV05-A10    | Intel® Atom™ D2700 | FAN         | CRT + LVDS<br>CRT+DVI<br>LVDS+DVI<br>LVDS+LVDS | 1st 24b, 1CH<br>2nd 24b, 2CH | SATA x 1<br>CFast™ x 1 | GbE x 2 | 6   | 5      | 1              | Mini Card x 1  | +12W/ AT/ATX | 0°C ~ 60°C |
| TF-GENE-CV05-A10-01 | Intel® Atom™ N2800 | Fanless     | CRT + LVDS<br>CRT+DVI<br>LVDS+DVI<br>LVDS+LVDS | 1st 18b, 1CH<br>2nd 24b, 2CH | SATA x 1<br>CFast™ x 1 | GbE x 2 | 6   | 5      | 1              | Mini Card x 1  | +12W/ AT/ATX | 0°C ~ 60°C |
| TF-GENE-CV05-A10-02 | Intel® Atom™ N2600 | Fanless     | CRT + LVDS<br>CRT+DVI<br>LVDS+DVI<br>LVDS+LVDS | 1st 18b, 1CH<br>2nd 24b, 2CH | SATA x 1<br>CFast™ x 1 | GbE x 2 | 6   | 5      | 1              | Mini Card x 1  | +12W/ AT/ATX | 0°C ~ 60°C |

## 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 4P 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
- **1700060157**  
Keyboard/Mouse Cable