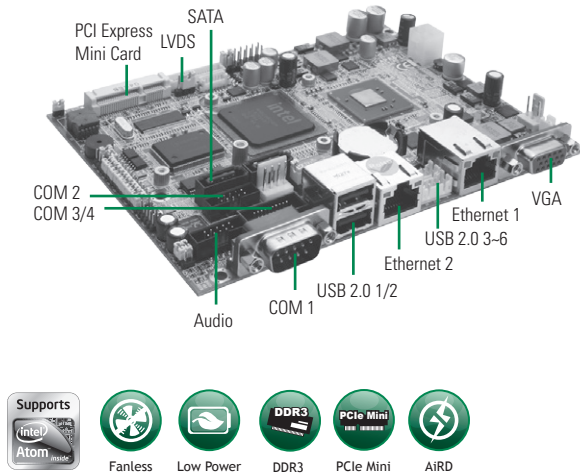


# CAPA801

Intel® Atom™ N455/ D425/ D525 3.5"  
Embedded SBC with Intel® ICH8M Chipset,  
LVDS VGA, Dual LANs and Audio



## System

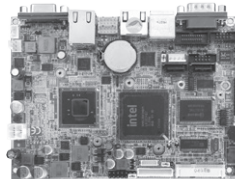
|                       |                                                                                                                                                                                                             |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                   | Intel® Atom™ processor N455 1.66 GHz, D425 1.8 GHz single core or D525 1.8 GHz dual core onboard                                                                                                            |
| System Memory         | 1 x 204-pin SO-DIMM supports DDR3-667/800 max. up to 4 GB (N455 supports DDR3-667 max. up to 2 GB. D425/D525 supports DDR3-800 max. up to 4 GB)                                                             |
| Chipset               | Intel® ICH8M                                                                                                                                                                                                |
| BIOS                  | AMI                                                                                                                                                                                                         |
| SSD                   | 1 x CompactFlash™ type-II                                                                                                                                                                                   |
| Watchdog Timer        | 255 levels, 1~255 sec.                                                                                                                                                                                      |
| Expansion Interface   | 1 x PCI Express Mini Card V1.2                                                                                                                                                                              |
| Battery               | Lithium 3V/220mAh                                                                                                                                                                                           |
| Power Input           | 2 x 2-pin connector<br>+12V DC-in only AT Auto Power ON function supported                                                                                                                                  |
| Power Requirements    | *Intel® Atom™ N455 @1.66 GHz, 1 GB DDR3<br>Max. RMS: +12V @ 851mA<br>*Intel® Atom™ D425 @1.8 GHz, 1 GB DDR3<br>Max. RMS: +12V @ 1.077A<br>*Intel® Atom™ D525 @1.8 GHz, 1 GB DDR3<br>Max. RMS: +12V @ 1.145A |
| Size                  | 146 x 104 mm                                                                                                                                                                                                |
| Board Thickness       | 1.6 mm                                                                                                                                                                                                      |
| Operating Temperature | Standard: 0° ~ +60°C (32°F ~ 140°F)<br>Optional: -20°C ~ +70°C (-4°F ~ +158°F)                                                                                                                              |
| Relative Humidity     | 10% ~ 95% relative humidity, non-condensing                                                                                                                                                                 |

## I/O

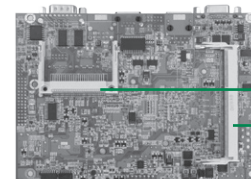
|                     |                                                                                                                                                                    |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MIO                 | 3 x RS-232 (COM 2 ~ 4) ; with +5V/+12V powered<br>1 x RS-232/422/485 (COM 1) ; with +5V/+12V powered                                                               |
| SATA                | 2 x SATA-300                                                                                                                                                       |
| Hardware Monitoring | Detect system temperature, voltage and fan speed                                                                                                                   |
| Ethernet            | 1st port 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel® 82567V<br>2nd port 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel® 82583V |
| Audio               | HD Codec audio as MIC-in/Line-in/Line-out/Speaker-out with Realtek ALC662                                                                                          |
| USB                 | 6 x USB 2.0                                                                                                                                                        |
| SMBus               | System Management Bus for advanced monitoring/control                                                                                                              |
| Digital I/O         | 8 channels IN/OUT programmable                                                                                                                                     |

## Features

- Intel® Atom™ processor N455 (1.66 GHz), D425/ D525 (1.8 GHz)
- 1 DDR3 SO-DIMM supports up to 4 GB memory capacity
- 6 USB 2.0
- 4 COM ports
- PCI Express Mini Card expansion



▲ Top view



▲ Rear view

## Display

|                   |                                            |
|-------------------|--------------------------------------------|
| Chipset           | Intel® GMA 3150 graphics core              |
| Memory Size       | Intel® DVM 4.0 compliant                   |
| Display Interface | 1 x VGA<br>1 x LVDS; 18-bit single channel |

## Packing List

### Standard

Quick installation guide, user's manual/utility CD, cable

### Cable

| Part Number  | Description                               | Qty |
|--------------|-------------------------------------------|-----|
| 59380000300E | 2 x COM w/ bracket P=1.27 x 2.54 L=300 mm | 1   |
| 59384500100E | Audio cable w/ bracket P=2,450 mm         | 1   |
| 59382631000E | 2 x USB 2.0 wafer cable w/ bracket 180 mm | 1   |

## Ordering Information

### Standard

|                                          |                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| CAPA801VGGA-N455 (fanless)               | 3.5" SBC with Intel® Atom™ processor N455, VGA/LVDS, 2 10/100/1000Mbps Ethernet, 4 COM, 6 USB and audio (P/N: E38E801100) |
| CAPA801VGGA-D525 (heatsink fan included) | 3.5" SBC with Intel® Atom™ processor D525, VGA/LVDS, 2 10/100/1000Mbps Ethernet, 4 COM, 6 USB and audio (P/N: E38E801102) |

### Optional/MOQ

|                                          |                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| CAPA801VGGA-D425 (heatsink fan included) | 3.5" SBC with Intel® Atom™ processor D425, VGA/LVDS, 2 10/100/1000Mbps Ethernet, 4 COM, 6 USB and audio (P/N: E38E801101) |
| AX95601 (P/N: E395601100)                | LVDS converter for scale up to 1920 x 1080 48bit                                                                          |
| AX95601 (P/N: E395601101)                | LVDS converter for pixel compensated to 1280 x 1024 48bit                                                                 |

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Appendix

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Axiomtek:](#)

[CAPA801VGGA-D525](#) [CAPA801VGGA-N455](#)