



## ECM-BSWA

Intel® Pentium®/Celeron® SoC Processor 3.5”  
Micro Module

- > Onboard Intel® Pentium®/Celeron® SoC BGA Processor
- > One 204-pin DDR3L SODIMM Socket Supports Up to 8GB DDR3L 1600 SDRAM
- > Triple Display (HDMI, LVDS, LVDS)
- > 1 SATA III, 4 USB 3.0, 2 USB 2.0, 6 COM, 2 x Mini-PCIe, 8-bit GPIO
- > Fanless
- > TPM 1.2 function (Optional)

### Spec

| System                              |                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor                           | Intel® Pentium®/Celeron® processor                                                                                                                  |
| System Memory                       | 1 x 204-Pin DDR3L 1600MHz SO-DIMM up to 8 GB                                                                                                        |
| I/O Chip                            | ITE_IT8528V/G/FX                                                                                                                                    |
| BIOS                                | AMI uEFI BIOS, 64 Mbit SPI Flash ROM                                                                                                                |
| Watchdog Timer                      | H/W Reset: 1sec. ~ 65535sec./min. and 1sec. or 1min./step                                                                                           |
| H/W Status Monitor                  | Monitoring System Temperature and Voltage with Auto Throttling Control                                                                              |
| Expansion                           |                                                                                                                                                     |
| Expansion                           | 2 x Mini PCIe (1 x Full-size Mini PCIe on solder side & with mSATA Supported, 1 x Half-size Mini PCIe)                                              |
| Storage                             |                                                                                                                                                     |
| Storage                             | 1 x mSATA<br>Supported from Mini PCIe                                                                                                               |
| Touch Screen                        |                                                                                                                                                     |
| Built-in Touch controller(optional) | EETIETP-CP-MER4485XRU<br>With 5-pin 2.0mm Box Header (Can be Selected to Support 5Wire Touch Screen)                                                |
| I/O                                 |                                                                                                                                                     |
| USB                                 | 2 x USB 2.0, 4 x USB 3.0                                                                                                                            |
| SATA                                | 1 x SATA III                                                                                                                                        |
| COM Port                            | 1 x RS-232/422/485, 5 x RS-232                                                                                                                      |
| DIO                                 | 8bit GPIO                                                                                                                                           |
| MIO                                 | 1 x LPC, 1 x SPI                                                                                                                                    |
| Display                             |                                                                                                                                                     |
| Chipset                             | Intel® Braswell SoC integrated Graphics<br>Supports Triple display                                                                                  |
| Resolution                          | HDMI: Max. resolution 1920x1080 @ 60Hz<br>LVDS: Max. resolution 1920x1080 @ 60Hz<br>LVDS + HDMI+ VGA(by pin header)<br>Dual-channel 18/ 24-bit LVDS |
| Audio                               |                                                                                                                                                     |
| Chipset                             | Realtek ALC892 HD codec Supports 5.1-CH Audio                                                                                                       |
| Ethernet                            |                                                                                                                                                     |
| Chipset                             | 2 x Intel I211AT                                                                                                                                    |
| Ethernet Interface                  | 10/100/1000 Base-Tx GbE compatible                                                                                                                  |
| LAN Port                            | 2 x RJ-45                                                                                                                                           |
| Mechanical & Environmental          |                                                                                                                                                     |
| Power Requirement                   | +12V ~ +26V                                                                                                                                         |
| ACPI                                | Single Power ATX Support S0, S3, S4, S5<br>ACPI 5.0 Compliant                                                                                       |
| Power Type                          | AT/ATX                                                                                                                                              |
| Operating Temp                      | 0°C ~ 60°C (32°F ~ 140°F)                                                                                                                           |
| Storage Temp                        | -40°C ~ 75°C (-40°F ~ 185°F)                                                                                                                        |
| Dimension (L x W)                   | 5.7" x 4" (146mm x 101mm)                                                                                                                           |
| Weight                              | 0.44lbs (0.2kg)                                                                                                                                     |
| Certifications                      |                                                                                                                                                     |
| Certification Information           | CE, FCC Class B                                                                                                                                     |
| Software Support                    |                                                                                                                                                     |
| OS Information                      | Win 10, Win 7, Linux                                                                                                                                |



 Ordering

ECM-BSWA-N3160-A1R  
3.5" W/N3160/1SATA/6COM/A1

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## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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