

# Single Board Computer



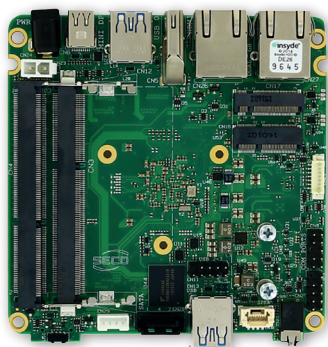
## SBC-A80-eNUC

SBC with the N-series Intel® Pentium® / Celeron® and x5-Series Atom™ SoCs in the embedded NUC™ form factor

## Multifunctional SBC on the eNUC form factor

Microsoft  
Azure

Certified



### HIGHLIGHTS



#### CPU

N-series Intel® Pentium® and Celeron® SoCs



#### GRAPHICS

Integrated Graphics, three independent display support



#### CONNECTIVITY

2x GbE; CIR sensor; 8x GPIOs



#### MEMORY

2 x DDR3L SO-DIMM Slots with Dual Channel Support, up to 8GB DDR3L-1600



DEVELOPMENT    SAMPLING    PRODUCTION

### MAIN FIELDS OF APPLICATION



Digital Signage -  
Infotainment



HMI



Industrial  
Automation and  
Control



Info Kiosks



Industrial  
Internet of  
Things



Multimedia  
devices



Point of Sales

### FEATURES

|  |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |
|--|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Processor</b>              | Intel® Pentium® <b>N3710</b> , Quad Core @ 1.6GHz (Turbo Boost 2.56GHz), 2MB Cache, 6W TDP<br>Intel® Celeron® <b>N3160</b> , Quad Core @ 1.6GHz (Turbo Boost 2.24GHz), 2MB Cache, 6W TDP<br>Intel® Celeron® <b>N3060</b> , Dual Core @ 1.6GHz (Turbo Boost 2.48GHz), 2MB Cache, 6W TDP<br>Intel® Celeron® <b>N3010</b> , Dual Core @ 1.04GHz (Turbo Boost 2.24GHz), 2MB Cache, 4W TDP<br>Intel® Atom™ <b>x5-E8000</b> , Quad Core @ 1.04GHz (Turbo Boost 2.00GHz), 2MB Cache, 5W TDP |                                                                                                                                                                                                                                                                                                                                                                     | <b>USB</b>              | 2 x USB 3.0 Host ports on Type-A sockets<br>2 x USB 2.0 Host ports on internal pin header<br>1 x USB 2.0 Host port on M.2 Connectivity Slot                                                                                                                                      |
|  | <b>PCI-e</b>                  | 1 x PCI-e x1 port on M.2 Connectivity Slot                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                     | <b>Audio</b>            | Audio available on HDMI and miniDP++ interfaces<br>HD Audio codec<br>Combo TRRS connector with LineOut and MicIn support                                                                                                                                                         |
|  | <b>Serial Ports</b>           | 2 x RS-232 / RS-422 / RS-485 UARTS, on internal Pin Header                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                     | <b>Other Interfaces</b> | I2C Touch Panel connector<br>Front Panel Pin Header<br>CIR (Consumer InfraRed) sensor<br>8 x GPIOs                                                                                                                                                                               |
|  | <b>Power Supply</b>           | +18V <sub>DC</sub> ÷ +32V <sub>DC</sub> recommended<br>+15V <sub>DC</sub> ÷ +36V <sub>DC</sub> absolute<br>RTC Battery                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                     | <b>Operating System</b> | Microsoft® Windows 7 (32 / 64 bit)<br>Microsoft® Windows 8.1 (32 / 64 bit)<br>Microsoft® Windows 10 (32 / 64 bit)<br>Microsoft® Windows 10 IoT<br>Microsoft® Windows Embedded Standard 7 (32 / 64 bit)<br>Microsoft® Windows Embedded Standard 8 (32 / 64 bit)<br>Linux<br>Yocto |
|  | <b>Operating Temperature*</b> | 0°C ÷ +60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                     | <b>Dimensions</b>       | 101.6 x 101.6 mm (4" x 4")                                                                                                                                                                                                                                                       |
|  | <b>Memory</b>                 | 2 x DDR3L SO-DIMM Slots with Dual Channel Support, up to 8GB DDR3L-1600                                                                                                                                                                                                                                                                                                                                                                                                              | <p>*Measured at any point of SECO standard heatspreader for this product, during any and all times (including start-up). Actual temperature will widely depend on application, enclosure and/or environment. Upon customer to consider application-specific cooling solutions for the final system to keep the heatspreader temperature in the range indicated.</p> |                         |                                                                                                                                                                                                                                                                                  |
|  | <b>Graphics</b>               | Integrated Graphics<br>Three independent display support<br>HW decoding of HEVC(H.265), H.264, MPEG2, MVC, VC-1, VP8, WMV9, JPEG/MJPEG formats<br>HW encoding of H.264, MVC and JPEG/MPEG formats                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |
|  | <b>Video Interfaces</b>       | HDMI connector<br>miniDP++ connector<br>embedded Display Port (eDP) internal connector                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |
|  | <b>Video Resolution</b>       | HDMI, DP: up to 3840x2160 24bpp @30Hz, 2560x1600 24bpp @60Hz<br>eDP: up to 2560x1440 24bpp @60Hz                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |
|  | <b>Mass Storage</b>           | Optional eMMC drive on-board<br>M.2 SATA SSD slot (Socket 2 Key B Type 2242 or 2260)<br>microSD Card slot<br>SATA 7p M connector                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |
|  | <b>Networking</b>             | 2 x Gigabit Ethernet ports                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                     |                         |                                                                                                                                                                                                                                                                                  |

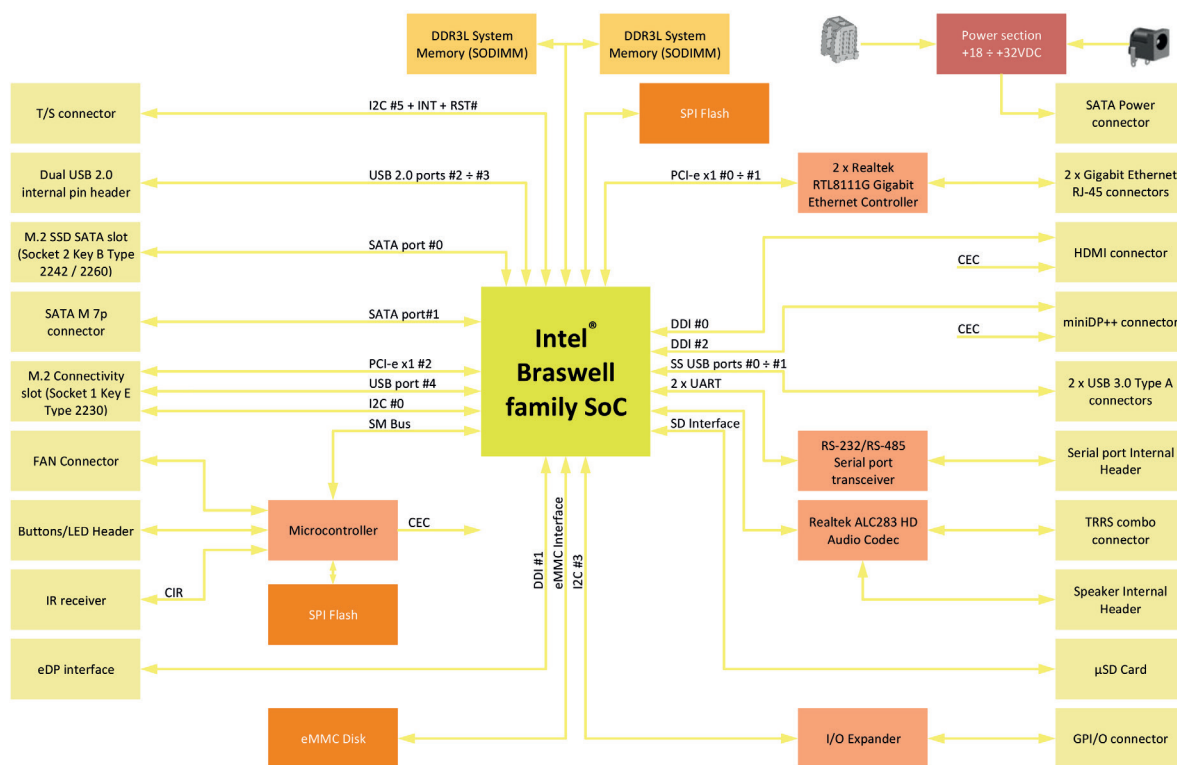


www.seco.com

# SBC-A80-eNUC

SBC with the N-series Intel® Pentium® / Celeron® and x5-Series Atom™ SoCs in the embedded NUC™ form factor

## BLOCK DIAGRAM



## ORDERING INFORMATION

| PN*               | DESCRIPTION                               |
|-------------------|-------------------------------------------|
| SA80-1030-0000-C0 | SBC - SBC-A80-eNUC - N3710 - 16GB eMMC    |
| SA80-1040-0000-C0 | SBC - SBC-A80-eNUC - N3710 - 32GB eMMC    |
| SA80-2030-0000-C0 | SBC - SBC-A80-eNUC - N3160 - 16GB eMMC    |
| SA80-2040-0000-C0 | SBC - SBC-A80-eNUC - N3160 - 32GB eMMC    |
| SA80-3030-0000-C0 | SBC - SBC-A80-eNUC - N3060 - 16GB eMMC    |
| SA80-3040-0000-C0 | SBC - SBC-A80-eNUC - N3060 - 32GB eMMC    |
| SA80-4030-0000-C0 | SBC - SBC-A80-eNUC - N3010 - 16GB eMMC    |
| SA80-4040-0000-C0 | SBC - SBC-A80-eNUC - N3010 - 32GB eMMC    |
| SA80-5030-0000-C0 | SBC - SBC-A80-eNUC - x5-E8000 - 16GB eMMC |
| SA80-5040-0000-C0 | SBC - SBC-A80-eNUC - x5-E8000 - 32GB eMMC |

\*Additional configurations may be available. Please inquire for more information.

## ACCESSORIES

| PN          | DESCRIPTION                                                                        |
|-------------|------------------------------------------------------------------------------------|
| CABKITA80   | Connection Cables Kit for SA80                                                     |
| SA80-DISS-1 | SBC - SECO eNUC p/n SA80 w/Intel Braswell processor family Heat Spreader (PASSIVE) |



www.seco.com