

# IC0120-83D

Robust DIN-rail Fanless Embedded System with Intel® Celeron® Processor N3350, COM or CAN, 2 LAN, 2 USB and DIO

## Features

- Extreme cost-effective with fanless and cableless design
- Intel® Celeron® processor N3350
- 1 COM or CAN, 2 USB, 2 GbE LAN
- 8-bit programmable DIO for IoT gateway applications
- Wide operating temperature range from -40°C to +70°C
- 12 to 24 VDC wide range power input
- OVP, UVP, OCP, RPP power protection design
- AXView 2.0 intelligent remote monitoring software for IIoT



## Specifications

Standard Color	Sliver																		
Construction	Extruded aluminum and heavy-duty steel, IP40																		
CPU	Intel® Celeron® processor N3350 (1.1 GHz, Dual Core)																		
System Board	SBC8783D																		
System Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB																		
BIOS	AMI UEFI BIOS																		
System I/O Outlet	<table border="1"> <tr> <td>Serial</td> <td>1 x RS-232/422/485 Interface select by BIOS Supports Auto Flow Control in RS-485 mode</td> </tr> <tr> <td>RTC</td> <td>Battery onboard</td> </tr> <tr> <td>USB</td> <td>2 x USB 2.0</td> </tr> <tr> <td>Storage</td> <td>Half-size mSATA shared with half-size mPCIe slot (option eMMC flash onboard)</td> </tr> <tr> <td>LAN</td> <td>2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT for IC0120) (Intel® i210-IT for IC0120-WT) Magnetic isolation protection 1.5KV</td> </tr> <tr> <td>Display</td> <td>1 x VGA (DB15 connector)</td> </tr> <tr> <td>DIO</td> <td>1 x DI/DO (8-bit programmable, DB9 female connector) Voltage is 5V TTL-level Programming: I/O sink current is 10mA (max.) Input/output can be programming</td> </tr> <tr> <td>CAN</td> <td>1 x CAN 2.0 A/B (DB9 connector) (IC0120-CAN)</td> </tr> <tr> <td>Power Input</td> <td>1 x DC power input with terminal block</td> </tr> </table>	Serial	1 x RS-232/422/485 Interface select by BIOS Supports Auto Flow Control in RS-485 mode	RTC	Battery onboard	USB	2 x USB 2.0	Storage	Half-size mSATA shared with half-size mPCIe slot (option eMMC flash onboard)	LAN	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT for IC0120) (Intel® i210-IT for IC0120-WT) Magnetic isolation protection 1.5KV	Display	1 x VGA (DB15 connector)	DIO	1 x DI/DO (8-bit programmable, DB9 female connector) Voltage is 5V TTL-level Programming: I/O sink current is 10mA (max.) Input/output can be programming	CAN	1 x CAN 2.0 A/B (DB9 connector) (IC0120-CAN)	Power Input	1 x DC power input with terminal block
Serial	1 x RS-232/422/485 Interface select by BIOS Supports Auto Flow Control in RS-485 mode																		
RTC	Battery onboard																		
USB	2 x USB 2.0																		
Storage	Half-size mSATA shared with half-size mPCIe slot (option eMMC flash onboard)																		
LAN	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT for IC0120) (Intel® i210-IT for IC0120-WT) Magnetic isolation protection 1.5KV																		
Display	1 x VGA (DB15 connector)																		
DIO	1 x DI/DO (8-bit programmable, DB9 female connector) Voltage is 5V TTL-level Programming: I/O sink current is 10mA (max.) Input/output can be programming																		
CAN	1 x CAN 2.0 A/B (DB9 connector) (IC0120-CAN)																		
Power Input	1 x DC power input with terminal block																		

Extension Interface	1 x Full-size PCI Express Mini Card slot with SIM slot (for wireless module) 1 x Half-size PCI Express Mini Card slot with mSATA (for wireless module or half size mSATA)
Watchdog Timer	255 levels, 1 to 255 sec.
System Indicator	Power, active
Power Supply	Power input range: 12 to 24 VDC, 1.39 to 0.72A (16.68 to 17.28W) Protection: OVP (±20%), reverse protection
Operating Temperature	-20°C to +70°C (-4°F to +158°F) -40°C to +70°C (-40°F to +158°F) (IC0120-WT)
Humidity	10% to 95%
Vibration Endurance	2 Gms (5 to 500Hz, amplitude 0.35 mm; operation/storage/transport)
Weight (net/gross)	0.3 kg (0.67 lb)/0.46 kg (1 lb)
Certifications	CE, FCC Class A
Dimensions	31 mm (1.22") (W) x 100 mm (3.93") (D) x 125 mm (4.92") (H)
EOS Support	Windows® 10 IoT, AXView 2.0 Linux support package (by request)

## Ordering Information

Standard	
ICO120-83D-N3350-COM (P/N: E22C120101)	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, COM, 2 LAN, 2 USB and DIO (-20°C to +70°C)
ICO120-83D-N3350-CAN (P/N: E22C120100)	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, CAN, 2 LAN, 2 USB and DIO (-20°C to +70°C)
ICO120-83D-N3350-COM-WT (P/N: E22C120102)	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, COM, 2 LAN, 2 USB and DIO (-40°C to +70°C)
ICO120-83D-N3350-CAN-WT (P/N: E22C120103)	Robust DIN-rail fanless embedded system with Intel® Celeron® processor N3350, CAN, 2 LAN, 2 USB and DIO (-40°C to +70°C)

Optional	
mSATA	
8812C1003A0E	ICO100/ICO120 wall mount bracket kit SFP
8816N3234A0E	3G/GPS UC20G kit for tBOX (3G ANT) (E)
8816N3235A0E	3G/GPS UC20G kit for tBOX (3G/GPS ANT) (E)
8812C3003A0E	SparkLAN WPEA-152GN Wi-Fi kit ICO SFP (E)
8812C3004A0E	SparkLAN WPEA-251N Wi-Fi kit ICO SFP (E)
82606200390E	LTE module SIERRA MC7304KIT for EU SFP
822C3001060E	LTE SIMCOM SIM7100C (TW) for ICO300 SFP

\* Specifications and certifications may vary based on different requirements.

## Dimensions

