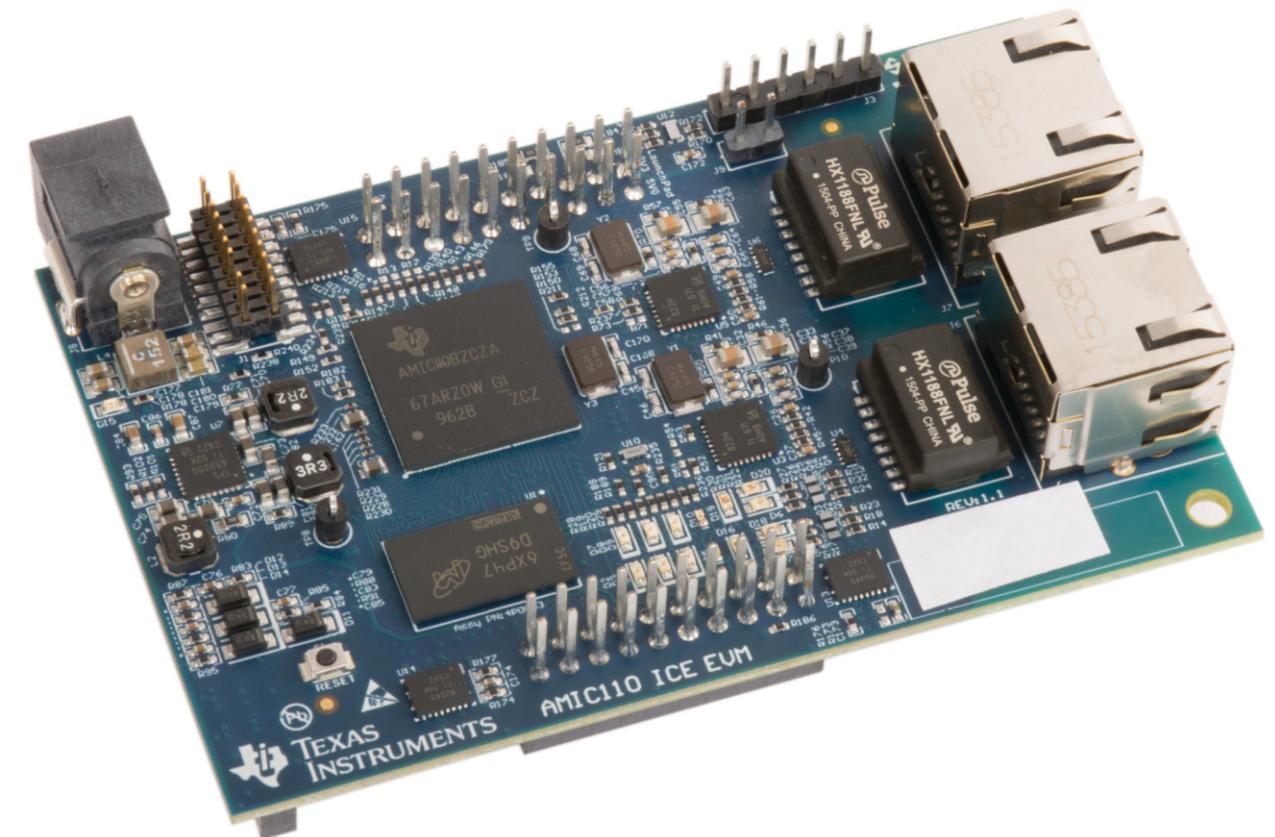


For more information:  
[www.ti.com/amic110](http://www.ti.com/amic110)



 TEXAS INSTRUMENTS

## AMIC110 Industrial Communications Engine (ICE) *For Industrial Ethernet and Connected Drives* Quick Start Guide

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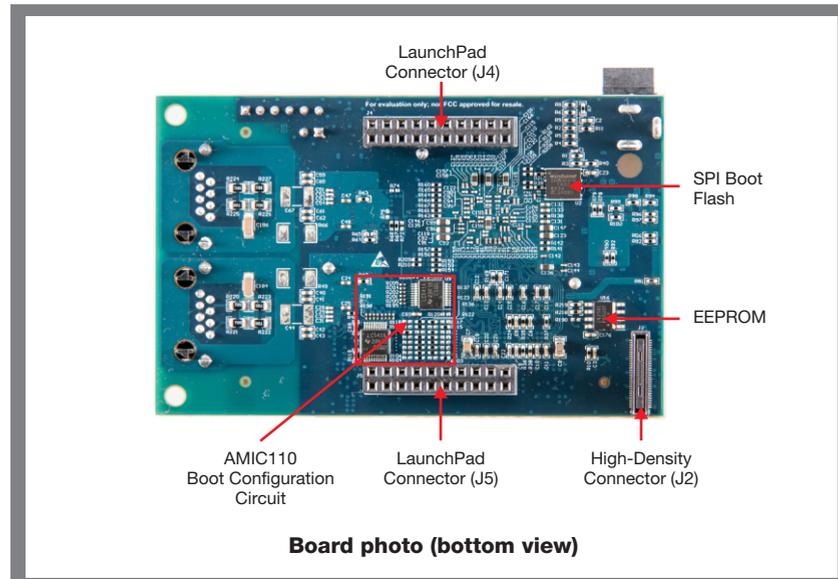
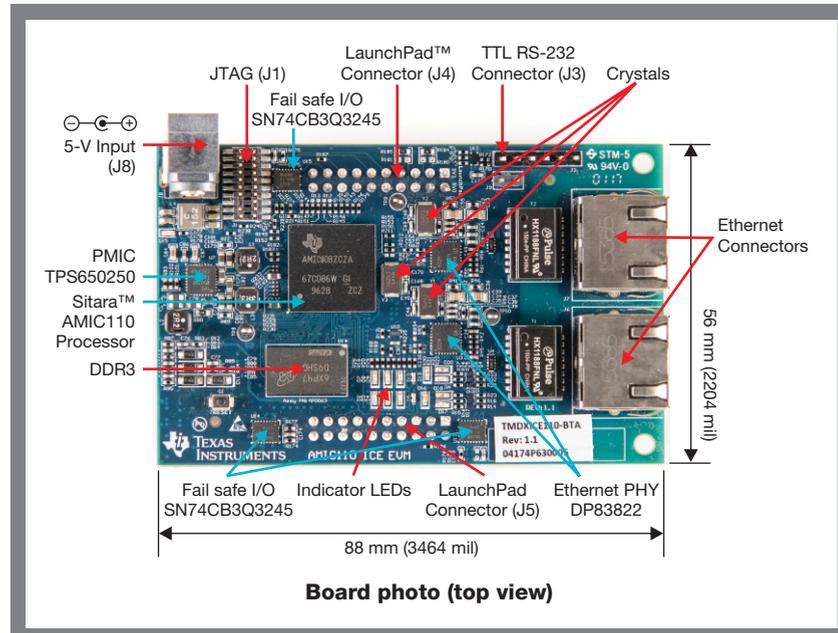
## Getting Started

Please visit [www.ti.com/tool/TMDXICE110](http://www.ti.com/tool/TMDXICE110). Here you'll find detailed information and resources on AMIC110 Industrial Communications Engine (ICE).

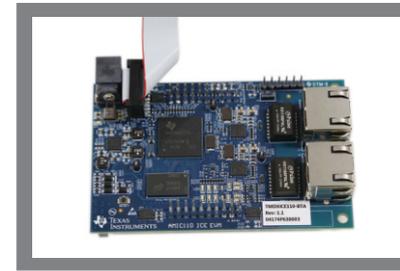
To get started quickly with the AMIC110 Industrial Communications Engine (ICE), please read through the following steps:

### Hardware setup

- 1 Unbox the board and identify various components and connectors



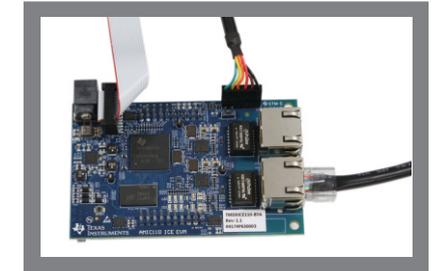
### Hardware setup (continued)



- 2 To download a bootable image into the onboard SPI Flash, connect a 20-pin JTAG emulator to J1 on the ICE board (emulator not included with kit). For example, the XDS100 or the XDS200 emulators may be used for this purpose and can be purchased from TI store: [XDS200](#) and [XDS100](#).



- 3 Connect the pin header connector of included TTL-232R-3V3 serial cable to J3 on the ICE board. Ensure that pin 1 of the serial cable (black wire, marked with a triangle) is connected to pin 1 of J3, which is indicated by a dot on the silk screen. Datasheet for this cable can be found at: [http://www.ftdichip.com/Support/Documents/DataSheets/Cables/DS\\_TTL-232R\\_CABLES.pdf](http://www.ftdichip.com/Support/Documents/DataSheets/Cables/DS_TTL-232R_CABLES.pdf). Also connect the USB connector of the serial cable to a PC host port.



- 4 Connect a CAT5 Ethernet cable from a PC running TwinCAT software to ECAT IN/PHY1 (J6) of the ICE board. If you have multiple ICE boards in a chain, please connect another CAT5 Ethernet cable from ECAT OUT/PHY2 (J7) to PHY1 of the next ICE board. PHY2 of the last ICE board in the chain is left open.



- 5 Connect the recommended power supply (CUI Inc. SMI18-5-V-P5, procurable at: <http://www.digikey.com/product-detail/en/cui-inc/SMI18-5-V-P5/102-3571-ND/5415042>) or equivalent (Output voltage/current: 5 Volts DC  $\pm$  10% @ 1.2 Amps; Output connector: 2.1-mm ID, 5.5-mm OD barrel plug, center positive) power supply to J8 on the ICE board. Apply power to the power supply to power up the ICE board. Do not hot plug the 5-V supply into the ICE board.

### Software setup

For software setup, please refer to AMIC110 Getting Started wiki here: [www.ti.com/AMIC110SW](http://www.ti.com/AMIC110SW)

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