Intel® Edison Development Platform

Introduction

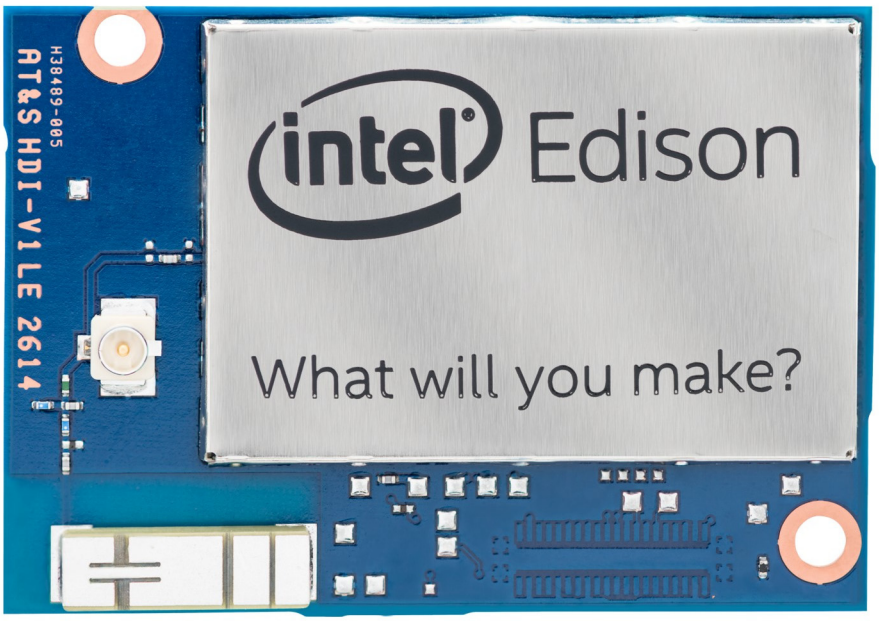
The Intel® Edison development platform is designed to lower the barriers to entry for a range of inventors, entrepreneurs, and consumer product designers to rapidly prototype and produce "Internet of Things" (IoT) and wearable computing products.

Intel® Edison Board for Arduino*

Supports Arduino Sketch, Linux, Wi-Fi, and Bluetooth.

Board I/O: Compatible with Arduino Uno (except 4 PWM instead of 6 PWM):

- 20 digital input/output pins, including 4 pins as PWM outputs.
- 6 analog inputs.
- 1 UART (Rx/Tx).
- 1 I^2C.
- 1 ICSP 6-pin header (SPI).
- Micro USB device connector OR (via mechanical switch) dedicated standard size USB host Type-A connector.
- Micro USB device (connected to UART).
- SD card connector.
- DC power jack (7 to15 VDC input).



Intel® Edison Breakout Board

Slightly larger than the Intel® Edison module, the Intel® Edison Breakout Board has a minimal set of features:

- Exposes native 1.8 V I/O of the Edison module.
- 0.1 inch grid I/O array of through-hole solder points.
- USB OTG with USB Micro Type-AB connector.
- USB OTG power switch.
- Battery charger.
- USB to device UART bridge with USB micro Type-B connector.
- DC power supply jack (7 to 15 VDC input).

Intel® IoT Analytics Platform

- Provides seamless Device-to-Device and Device-to-Cloud communication.
- Ability to run rules on your data stream that trigger alerts based on advanced analytics.
- Foundational tools for collecting, storing, and processing data in the cloud.
- Free for limited and noncommercial use.

Intel® Edison Development Platform

PHYSICAL	
Form factor	Board with 70-pin connector
Dimensions	35.5 × 25.0 × 3.9 mm (1.4 × 1.0 × 0.15 inches) max
C/M/F	Blue PCB with shields / No enclosure
Connector	Hirose DF40 Series (1.5, 2.0, or 3.0 mm stack height)
Operating temperature	32 to 104°F (0 to 40°C)
EXTERNAL INTERFACES	
Total of 40 GPIOs, which can be configured as:	
SD card	1 interface
UART	2 controllers (1 full flow control, 1 Rx/Tx)
I2C	2 controllers
SPI	1 controller with 2 chip selects
I2S	1 controller
GPIO	Additional 12 (with 4 capable of PWM)
USB 2.0	1 OTG controller
Clock output	32 kHz, 19.2 MHz
MAJOR EDISON COMPONENTS	
SoC	22 nm Intel® SoC that includes a dual-core, dual-threaded Intel® Atom™ CPU at 500 MHz and a 32-bit Intel® Quark™ microcontroller at 100 MHz
RAM	1 GB LPDDR3 POP memory (2 channel 32bits @ 800MT/sec)
Flash storage	4 GB eMMC (v4.51 spec)
WiFi	Broadcom* 43340 802.11 a/b/g/n; Dual-band (2.4 and 5 GHz) Onboard antenna or external antenna (SKU configurations)
Bluetooth	Bluetooth 4.0
POWER	
Input	3.3 to 4.5 V
Output	100 ma @3.3 V and 100 ma @ 1.8 V
Power	Standby (No radios): 13 mW Standby (Bluetooth 4.0): 21.5 mW (BTLE in Q4-14) Standby (Wi-Fi): 35 mW
FIRMWARE + SOFTWARE	
CPU OS	Yocto Linux* v1.6
Development environments	Arduino* IDE Eclipse supporting: C, C++, and Python Intel XDK supporting: Node.JS and HTML5
MCU OS	RTOS
Development environments	MCU SDK and IDE