

Intel Edison Breakout Kit



Brief Introduction:

This Kit includes a tiny Edison fits nicely onto a breakout board - sort of like a tiny IoT sparrow into a very small nest, so you can expose the native 1.8 V I/O of the Edison.

And it is for non-Arduino users. This breakout board has a minimalistic set of features and is slightly larger than the Edison module.

Dimensions : 61mm x 29mm x 12mm

Main Features:

- Uses a 22nm Intel® SoC that includes a dual core, dual threaded Intel® Atom™ CPU at 500MHz and a 32-bit Intel® Quark™ microcontroller at 100 MHz. It supports 40 GPIOs and includes 1GB LPDDR3, 4 GB EMMC, and dual-band WiFi and BTLE on a module slightly larger than a postage stamp.
- The Intel Edison module will initially support development with Arduino* and C/C++, followed by Node.JS, Python, RTOS, and Visual Programming support in the near future.
- It includes a device-to-device and device-to-cloud connectivity framework to enable cross-device communication and a cloud-based, multi-tenant, time-series analytics service.
- The breakout board has exposes native 1.8V I/O of edison module. And 0.1" grid I/O array of through-hole solder points. USB OTG with USB Micro Type-AB connector, USB OTG power switch. Battery Charge, USB to device UART bridge with USB Micro Type-B connector, λ DC power supply jack (7V – 15V DC input).

Specification:

Physical	
Form factor	Board with 70-pin connector
Dimensions	61mm x 29mm x 12mm
Operating temperature	0 to 40 degC
Connector	Hirose DF40 Series (1.5mm, 2.0mm, or 3.0mm stack height)
Memory	
Max Memory size	4GB
Memory type	DDR3, Nand Flash
Physical add. Ext.	32-bit
# of DIMMs	0
ECC Memory supported:	NO
External Interfaces	
Total of 40 GPIOs which can be configured as:	
SD Card	1 Interface
UART	2 Controllers
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	22nm Intel SoC includes: a dual core, dual threaded Intel Atom CPU at 500MHz, and a 32-bit Intel Quark microcontroller at 100 MHz
RAM	1 GB LPDDR3 POP memory
Flash Storage	4 GB eMMC
WiFi	Broadcom 43340 802.11 a/b/g/n
	Dual-band (2.4 and 5 GHz)
	On board antenna or external antenna SKU configurations
Bluetooth	BT 4.0
Power	
Input	3.3V – 4.5V
Output	100ma @3.3V and 100ma @ 1.8V
Power	Standby (No radios): 13mW
	Standby (BT 4.0): 21.5mW
	Standby (WiFi): 35 mW
Firmware +	

Software	
CPU OS	Yocto Linux v1.6
Development Environments	Arduino IDE
	Eclipse supporting: C, C++ & Python
	Intel XDK supporting: Node.JS & HTML5
MCU OS	RTOS
Development Environments	MCU SDK and IDE

Tech. Documents:

- [Intel Edison Product Page](#)
- [Intel Edison Product Brief](#)
- [Getting Start](#)
- [Software Download](#)
- [Forum](#)
- [Support](#)