Intel® Edison

SKU: 102990283

Description

Brief Introduction:

The Intel® Edison development platform is bringing down barriers in the world of wearables and IoT technology.

<u>Dimensions：32.5 x 25.0 x 3.9 mm</u>

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.

Specification:

Physica	
Form factor	Board with 70-pin connector
Dimensions	32.5 x 25.0 x 3.9 mm
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