

IOT2000[®] industrial module for IoT solutions

The new ELITE Sistemas IOT2000[®] core enables the rapid creation of custom IoT devices for every industrial application bringing remote manageability and cost efficiency to the next wave of intelligent connected devices.

Product overview

ELITE Sistemas is proud to announce the first dual asymmetric core module for real-time industrial IoT applications powered by Intel[®] Quark[™] microcontroller D2000 and Espressif ESP8266 EX cores.

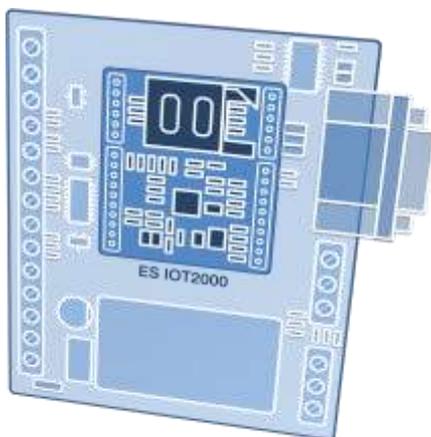
Within its small 3.9 x 4.5 cm footprint, the IOT2000 module includes two application ready low-power, battery-operable, 32-bit microcontrollers, GPRS cellular data and WiFi, and increased input/output options for industrial applications.

The IOT2000 module and application boards are qualified over an industrial temperature range (-40 °C to +85 °C).

Fastest time-to-market

Custom ready-for-production application boards based on IOT2000 core module are designed, manufactured and tested in minimal time due to highly hardware and software reusable design, simplifying creation of specific end-to-end IoT solution.

IOT2000 development kit provides the tools required to allow immediate development of applications for IOT2000 core module.



IOT2000 application board



ELITE SISTEMAS IOT2000[®] IS IDEAL FOR A WIDE RANGE OF VERTICALS



Smart power control



Industrial monitoring



Smart vending machine



Logistics and healthcare

Remote device management

The ELITE Sistemas IOT2000 module provides support for 'zero-touch', ready from factory, massive deployment and management of device applications over GPRS/WiFi data. Also, remote device notifications, and alarms allow full control of your data at every endpoint.

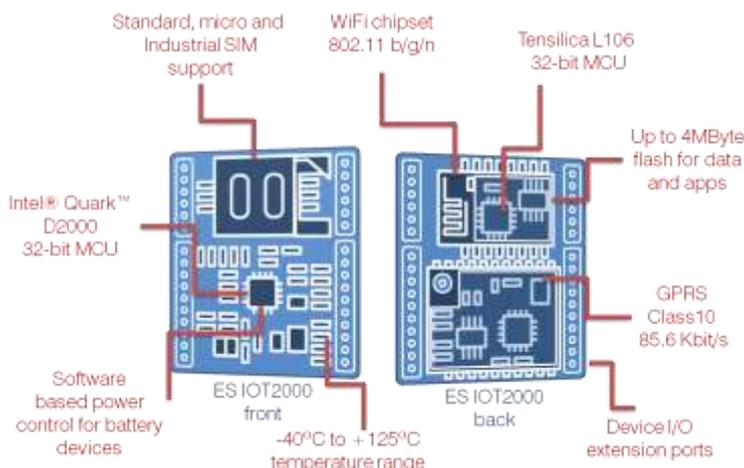
Every IOT2000 module and application board is ready to be managed remotely from third party device management platforms.

Flexible interfaces for every application

The IOT2000 core module allows exposure of bidirectional I/O pins can be

used in each application as general purpose I/O (GPIO). With programmable drive strength and integrated pull-ups, they can be connected directly to LEDs, relays, H-bridges, or switches. Moreover, analog comparator and input channels for ADC provide 2.28 MSps SAR ADC with selectable 6/8/10/12-bit resolution.

IOT2000® industrial module features at a glance



FEATURE	SPECIFICATION
CPU cores	32-bit processor @ 32 MHz Intel® Pentium® x86-compatible without x87 floating point unit 32-bit Tensilica L106
Wireless communications	WiFi 802.11 b/g/n GPRS class 10
UART	3 16550-compliant interfaces
GPIO	22
SPI	1 master
I ² C	1 (master/slave)
ADC	8-channel SAR (12/10/8/6-bit@2.4/2.8/3.3 MSps)
Analog comparators	8

FEATURE	SPECIFICATION
Application timers	2
PWM timers	2
Flash memory	Quark D2000 processor: 32 KB + 8 KB Tensilica processor: 512 KB / 1MB / 2 MB / 4MB options
Module dimensions	39 x 45 x 6 mm
Module weight	15 g
Platform power	DC 5V
Operating temperature	-40 °C to +85 °C



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