Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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By QOITECH

otii

TECHNICAL SPECIFICATION

OPTIMIZE POWER USAGE IN IoT DEVICES

Qoitech AB is a Sony Group company bringing to market the Otii solution a comprehensive toolkit for energy optimization of devices within IoT, Internet of Things. Otii was envisioned by a team of developers at Sony Mobile Communications, leveraging twenty years' experience in developing energy optimized devices for the global telecom market. Otii launched in Europe in July 2017, and is one of the new businesses established within the Sony acceleration and incubation program in Europe. Otii is used by a growing number of developers committed to creating energy-efficient and sustainable IoT devices.

www.qoitech.com

FEATURES

Free Viewer	Otii Standard	Otii Premium
Open Project	Open Project	Open Project
View existing data	View existing data	View existing data
Navigate	Navigate	Navigate
Statistics	Statistics	Statistics
Show/hide recordings	Show/hide recordings	Show/hide recordings
Show/hide visualizations	Show/hide visualizations	Show/hide visualizations
Filter log	Filter log	Filter log
Change offsets	Change offsets	Change offsets
	Devices	Devices
	Settings	Settings
	New Projects	New Projects
	Save project	Save project
	Record new data	Record new data
	Export to CSV	Export to CSV
	Downsample	Downsample
		Battery profiling
		Battery simulation
		Scripting & Automation

SPECS

	Min	Typ	Max
OPERATING ENVIRONMENT	15 °C / 60 °F		25 °C / 77 °F
USB POWER SUPPLY (1)			
Output Voltage (auto range)	0.5 V		3.75 V
Output Voltage (locked to High Current range)	0.5 V		4.2 V
Output Voltage Setting Resolution		1 mV	
Output Voltage Accuracy		±1%	
Output Current		250 mA	
EXTERNAL 7.5-9V POWER SUPPLY (2)			
Output Voltage (auto range)	0.5 V		4.55 V
Output Voltage (locked to High Current range)	0.5 V		5.0 V
Output Voltage Setting Resolution		1 mV	
Output Voltage Accuracy		±1%	
Output Current, max continuous (3)		2.5 A	
Output Current, max peak (3)		5.0 A	

	Min	Typ	Max
PROGRAMMABLE CURRENT SINK			
Sink current	0 A		2.5 A
Sink current, resolution		39 µA	
Sink voltage, USB power supply	0.85V[4]		4.2V
Sink voltage, external power supply	0.85V[4]		5.0V
CURRENT MEASUREMENT			
Accuracy		±(1% + 0.5 µA)	
Sample Rate in ±19 mA range		4 ksps	
Sample Rate in ±2.7 A range		1 ksps	
Sample Rate in 0 – 5 A range		1 ksps	
Analog Bandwidth (3dB)		400 Hz	
VOLTAGE MEASUREMENT			
Total accuracy		±(1% + 10 mV)	
Sample Rate		1 ksps	
UART			
Bitrate	9600 bps		4 M bps
DIGITAL I/O; GPO1, GPO2, TX [5]			
V_{IO}, Expansion Port Operating Voltage	1.2 V	V_{IO}[6]	5 V[7]
V_{IL}, Low-level input voltage			V_{IO} * 0.2 V
V_{IH}, High-level input voltage	V_{IO} * 0.8 V		
I_{max}, Maximum sink/source current			10 mA
ADC, Differential Analog/Digital Conversion pins ADC-, ADC+ [8]			
Voltage input	0 V		5 V
Shunt Voltage Range	-81.9175 mV		81.2 mV
Resolution		2.5 µV	
Accuracy		±(0.1% + 10 µV)	
Input Impedance		220 kΩ	
ADC, Single Ended Analog/Digital Conversion pin ADC+			
Voltage input	0 V		5 V
Resolution		1.25 mV	
Accuracy		±(0.1% + 7.5 mV)	
Input Impedance		830 kΩ	
SENSE, pins SENSE- and SENSE+			
Voltage input	0 V		5 V
Resolution		1.5 mV	
Accuracy		1%	
Input impedance		1 MΩ	

1) USB power capacity and reliability in laptops and desktops greatly depend on host USB port/cable design.
2) See list of recommended external power supplies and powered USB hubs at www.otii.com/FAQ
3) Depends on chosen power supply. Otii Arc will monitor internal temperature and cut off if temperature limit is reached.
4) Sink voltage can go below this specification if locked to high range. It is possible to go down to 0.5V if the sink current is below 1.9A. For currents below 19mA, the measurement will have a lot more noise when locked to high range than in auto range.
5) See Nexperia SN74LVC8T245 for details.
6) Expansion Port Digital voltage level is set by user in Otii SW.
7) Maximum voltage will depend on your USB power supply and USB cable.
8) See TI INA226 for details.

Otii helps companies create energy efficient apps and IoT devices to meet the increasing market demands for long-lasting products. Our state-of-the-art solution leverages on over fifteen years' experience in developing energy optimized smart devices for the global telecom market. The Otii system is a comprehensive toolkit for energy optimization of IoT devices.
It is easy to use, requires minimal setup, and lets developers measure and analyze energy usage at any stage of development. Otii is owned by Qoitech and is a part of Sony.

Learn more: www.qoitech.com

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