

TECHNOLOGY TEARDOWN

WEARABLES

POWER MANAGEMENT

WIRELESS CONNECTIVITY

MCU

PROCESSOR



SENSORS

FPGA

DISPLAY

Component	Technology	Suppliers	Suggested Products	Development Kits
SENSORS				
Sensors	Optical, Humidity, Temperature, Biometric	Silicon Labs	Si1133, Si7059, Si7006 Si1143/44	SENSOR-PUCK, Thunderboard Sense, HRM-WG-BIO-44, SLSTK3201A
PROCESSOR/MCU				
MCU (8/32 bit)	8 - Bit, 32 - Bit, C8051	Silicon Labs	Giant Gecko, Wonder Gecko, Leopard Gecko	EFM32WG-STK3800, SLSTK3701A SLSTK2030A, SLSTK2001A
WIRELESS CONNECTIVITY				
GNSS	GPS, GLONASS, Galileo or Beidou	TELIT	SE873/SE873Q5, SE868	SE873-GNSS-EVK
WIFI	802.11 a/b/g/n	Silicon Labs, Gainspan	WF111, AMW036, GS2200MIZ	Wizard Gecko Wifi Module Wireless Starter Kit
ANT	2.4GHz ISM band communication	Nordic, Taiyo Yuden	nrF52840, nRF52832, EYSHSNZWZ	EKSHSNZWZ, nRF52840 Preview DK
Bluetooth	Bluetooth Low Energy, Bluetooth Mesh	Silicon Labs, Nordic, Taiyo Yuden	EYSHSNZWZ, nrF52840, nRF8001, BGM11S, EFR32BG	EKSHSNZWZ, nRF52840 Preview DK, SLWSTK6020B
BT Dual Mode Audio SoC	BT5.0 w/ DSP audio codec	RealTek	RTL8763B	
Cellular	3G, 4G LTE	Telit	LE866	LTE-In-A-Box Dev Kit
Antenna	Internal (PCB, Flex, SMD)	Ethertronics	M830120 (1.5 Ghz, 1.6 Ghz), 1001312 (2.4Ghz)	M830120-01
Combo Modules	BT + Wifi	Taiyo Yuden	WYSBMVGXB	WBSBHVXGX
SIP	Micro controller unit, low power GNSS (MT2523G), dual mode Bluetooth & PMU	MediaTek	MT2523D/2523G,	LinkIt 2523 HDK
POWER MANAGEMENT, BATTERY MANAGEMENT, DISPLAY, FPGA				
DC-DC Step Up Converter	3.6A, 1MHz, Synchronous, Step-Up Converter with Output Disconnect	Monolithic Power Systems	MP3415	
DC-DC Step Down Converter	step-down, switch-mode converter	Monolithic Power Systems	MP2141N, MP2159A, MP2161A, MPQ4470, MPQ4473	
LED Driver, LCD Backlight	White LED Driver	Monolithic Power Systems	MP3306, MP3309, MP3312	
LDO	24V, 150mA, Low Quiescent Current Linear Regulator	Monolithic Power Systems	MP2015A	EV2015A-J_Q_G-00A
Battery Charger	5V USB linear charger	Monolithic Power Systems	MP2661	EV2661-C-00A
Load Switch	5.5V, 2A, Low RDSON Load Switch With Programmable Current Limit	Monolithic Power Systems	MP5073	EV5073-G-00B
AMP	Ultra Low Power 1.8V, Op Amp	Monolithic Power Systems	MP8101, MP8102	
USB	Current-Limited Power Distribution Switch	Monolithic Power Systems	MP62055, MP62550, MP62551	
Display Power	2.7V-5.5Vin, 1.2MHz, Dual-ch, LCD Bias Power Supply	Monolithic Power Systems	MP5610	EV5610-QG-00A
FPGA	World's smallest, lowest power, most integrated mobile FPGAs	Lattice Semiconductor	iCE40 ultra Plus	