Accessory Development Kits for Android Smartphones and Tablets

Designing an accessory for Android smartphones or tablets has never been easier! Microchip's accessory development kits and libraries give you freedom to innovate new accessories for Android devices. These kits also help designers get accessory products to market faster.

Benefits of Microchip's development kits:

- Support the Android Open Accessory Framework in the Android OS v2.3.4 and v3.1, and later
- Provide examples creating accessories where the Android device is a USB host
- Support for wired and wireless connectivity
- Firmware Update/Bootloader through apps

Accessory Development Starter Kits

New accessories are emerging in diagnostics, sports, fitness, wellness, and financial transaction markets. Microchip's accessory development kits offer designers an opportunity to develop end-products that meet functional complexity, form factor, connectivity and power requirements.

PIC24F PIC MCU Accessory Development Kit (DM240415)

- Type A USB connector
- User interface buttons
- LEDs and potentiometer
- Charger circuitry up to 500 mA
- PIC24F 16-bit PIC MCU with USB OTG

PIC32 PIC MCU Accessory Development Kit (DM320412)

- Brilliant 16-bit color display
- On-chip audio SRC
- MP3 decode
- Supports 8/16/24/44.1/32/48 kHz audio sample rate
- 80 MIPS 32-bit PIC MCU with 512 KB Flash

How Do I Start?

- Purchase the accessory development starter kit(s) through a Microchip channel partner
- Download the free licensed software library from www.microchip.com/android
- Ensure your Android device(s) support OS v2.3.4 or v3.1, or later
- Contact androidsupport@microchip.com for additional questions

MICROCHIP

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Accessory Development Kit Portfolio

Products	Where to Buy
PIC24F PIC MCU Accessory Development Kit (DM240415)	Microchip Channel Partners
PIC32 PIC MCU Accessory Development Kit (DM320412)	

nanoWatt XLP eXtreme Low Power PIC® MCUs are Ideal for Android Device Accessories

Many accessories require battery power, making energy conservation paramount. To enable these applications, products with Microchip's nanoWatt XLP technology offer the industry's lowest currents for Run and Sleep.

Benefits of nanoWatt XLP technology include:

- Sleep current below 20 nA
- Brown-out Reset down to 45 nA
- Watch-dog Timer down to 220 nA
- Real-time Clock/Calendar down to 470 nA
- Run currents down to 35 µA/MHz
- Full analog and self-write capability down to 1.8V

Additional information, visit: www.microchip.com/xlp

Universal Serial Bus (USB)

USB has grown to be the standard wired interface on smartphones / tablets. With the addition of Embedded host and OTG, the mobile devices mobilize the desktop and applications. Microchip's simple and easy-to-use USB solutions offer a wide variety of 8, 16 and 32-bit USB MCUs for basic, low cost to complex accessory applications.

Additional information, visit: www.microchip.com/usb

Bluetooth® Wireless Technology

Bluetooth is becoming a popular choice of wireless connectivity between accessories and smartphones or tablets. Microchip offers various options to connect to the Bluetooth of your choice while meeting the Android OS specification.

Additional information, visit: www.microchip.com/bluetooth

Low Power Analog Portfolio

Microchip offers a broad portfolio of low power analog products that support a wide variety of applications. With over 700 unique stand-alone analog products covering thermal management, power management, battery management, mixed-signal, linear, interface and safety and security.

Low Iq Operational Amplifiers

- Up to 60 MHz gain bandwidth product
- Quiescent current as low as 450 nA per channel
- Operating voltage down to 1.4V
- Small SOT-23 and SC-70 packaging

Low Dropout Voltage Regulators

- Quiescent current as low as 1.6 µA
- Output voltage as low as 0.8V
- Output current from 50 mA to 1.5A

Switching Voltage Regulators

- Boost regulators with 0.65V start-up voltage
- 4V to 30V input Buck Regulators
- Up to 96% efficiency

Battery Management

- Li-ion/Li-polymer linear chargers
- Up to 1.1A charging current
- 1-/2-cell, OVP and load sharing solutions

Additional information, visit: www.microchip.com/analog

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www.microchip.com/smartphone

Visit our web site for additional product information and to locate your local sales office.

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