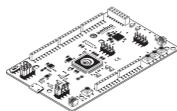


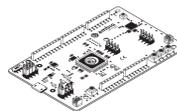
MCU and SoC Products Overview



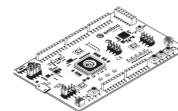
Apollo



Apollo2



Apollo2 Blue



Apollo3 Blue



Apollo3 Blue Plus

	Apollo	Apollo2	Apollo2 Blue	Apollo3 Blue	Apollo3 Blue Plus
MCU Frequency	24 MHz	48 MHz	48 MHz	48 MHz 96 MHz TurboSPOT	48 MHz 96 MHz TurboSPOT
MCU	32-bit Arm Cortex-M4F	32-bit Arm Cortex-M4F	32-bit Arm Cortex-M4F Dedicated BLE Core	32-bit Arm Cortex-M4F, DMA, Arm Cortex-M0 for BLE	32-bit Arm Cortex-M4F, DMA Arm Cortex-M0 for BLE
MCU Power Efficiency	34 μ A/MHz	10 μ A/MHz < 3 μ A Deep Sleep Mode	10 μ A/MHz < 3 μ A Deep Sleep Mode	< 6 μ A/MHz < 1 μ A Deep Sleep Mode	< 6 μ A/MHz < 1 μ A Deep Sleep Mode
NVM	512KB Flash	1MB Flash	1MB Flash	1MB Flash	2MB Flash
SRAM	64KB	256KB	256KB	384KB	768KB
Voltage	2.2-3.8 V	1.755-3.63 V	1.755-3.63 V	1.755-3.63 V	1.755-3.63 V
ADC	10-bit, 13-channel, up to 800 kSps Sampling Rate ADC	14-bit, 15-channel, up to 2.67 MS/s Sampling Rate ADC	14-bit, 15-channel, up to 2.67 MS/s Sampling Rate ADC	14-bit, 15-channel, up to 2.67 MS/s Sampling Rate ADC	14-bit, 15-channel, up to 2.67 MS/s Sampling Rate ADC
UART	1	2	2	2	2
I/O	I ² C/SPI master (2x) I ² C/SPI slave	I ² C/SPI master (6x) I ² C/SPI slave	I ² C/SPI master (4x) I ² C/SPI slave	I ² C/SPI master (6x) I ² C/SPI slave	I ² C/SPI master (6x) I ² C/SPI slave
MSPI	-	-	-	Dual/Quad/Octal-SPI Master 48 MHz SDR ISO7816 Master	Dual/Quad/Octal-SPI Master (3x) 48 MHz SDR ISO7816 Master
I ² S	-	I ² S slave for PDM Audio Pass-through	I ² S slave for PDM Audio Pass-through	I ² S slave for PDM Audio Pass-through	I ² S slave for PDM Audio Pass-through
Audio	-	Dual Interface PDM for Mono and Stereo Audio Microphones	Dual Interface PDM for Mono and Stereo Audio Microphones	Dual Interface PDM for Mono and Stereo Audio Microphones	Dual Interface PDM for Mono and Stereo Audio Microphones
Display	-	-	-	SPI 3-wire/4-wire	SPI 3-wire/4-wire Dual/QuadSPI
Graphics	-	-	-	-	-
Security	-	-	AES 128-bit Encryption	SecureSPOT	SecureSPOT
Connectivity	-	-	BLE 5	BLE 5	BLE 5
RF Sensitivity	-	-	-95 dBm	-94 dBm	-94 dBm
Rx Current	-	-	3.5 mA	3 mA	3 mA
Tx Current	-	-	5 mA @ 0 dBm	3 mA @ 0 dBm	3 mA @ 0 dBm
Tx Output Power	-	-	-40 dBm to +5 dBm	-20 dBm to +4 dBm	-20 dBm to +4 dBm
Packages	<ul style="list-style-type: none"> • 4.5 mm x 4.5 mm, 64-pin BGA with 50 GPIO • 2.49 mm x 2.90 mm, 41-pin WLCSP with 27 GPIO 	<ul style="list-style-type: none"> • 4.5 mm x 4.5 mm, 64-pin BGA with 50 GPIO • 2.5 mm x 2.5 mm, 49-pin WLCSP with 34 GPIO • 2.5 mm x 2.5 mm, 49-pin WLCSP with 300um with backside coating (Thin) 	<ul style="list-style-type: none"> • 4 mm x 4 mm x 0.9mm, 64-pin LGA with up to 31 GPIO 	<ul style="list-style-type: none"> • 4.5 mm x 4.5 mm, 81-pin BGA with 50 GPIO • 3.25 mm x 3.37 mm, 66-pin WLCSP with 37 GPIO • 3.25 mm x 3.37 mm, 66-pin WLCSP 300um with backside coating (Thin) 	<ul style="list-style-type: none"> • 5.3 mm x 5.3 mm x 0.8 mm, 108-pin BGA with 74 GPIO
Ordering Information	<ul style="list-style-type: none"> • APOLLO512-KBR (BGA) • APOLLO512-KCR (WLCSP) • AMAP1EVB (EVB) 	<ul style="list-style-type: none"> • AMAPH1KK-KBR (BGA) • AMAPH1KK-KCR (WLCSP) • AMAPH1KK-KCR-TB (Thin) • AMAPHEVB (EVB) 	<ul style="list-style-type: none"> • AMA2B1KK-KLR • AMA2BEVB (EVB) 	<ul style="list-style-type: none"> • AMA3B1KK-KBR-B0 (BGA) • AMA3B1KK-KCR-B0 (WLCSP) • AMAP31KK-KCR (WLCSP, non-BLE) • AMA3B1KK-KCR-TB (Thin) • AMA3BEVB (EVB) 	<ul style="list-style-type: none"> • AMA3B2KK-KBR • AMA3B2EVB (EVB)