

BSEC Binary Size Information

1. Platform Supported Currently

| Platform | Compiler | TYPE |
|--------------|-------------------------|---|
| Cortex-ARM | ARMCC | Cortex-M0, M0+, M3, M4, M4_FPU, M7 |
| Cortex-ARM | GCC | Cortex-M0, M0+, M3, M33, M33F, M4, M4_FPU, M7 |
| Cortex-A* | GCC | Cortex-A7 |
| AVR_8bit | AVR-GCC | MegaAVR, XMEGA |
| AVR_32bit | AVR-GCC | 32-bit AVR UC3 |
| ESP | xtensa-lx106-elf-gcc | ESP |
| MSP430 | msp430-elf-gcc | MSP430 |
| IAR | IAR compiler | Cortex-M0, M0+, M3, M4, M4_FPU, M7 |
| Raspberry pi | Arm-linux-gnueabihf-gcc | Pi0-armv6 32bits, pi3-armv8-a 64bits |
| Windows | GCC | |
| Linux | GCC | |
| MacOS | GCC | |

2. Binary Size on different platform

| Platform Type | Compiler | ROM size of API in bytes | ROM(.text+.data) in bytes Normal/lite | RAM(.data+.bss) in bytes Normal/lite |
|---------------|----------|-----------------------------|---|--|
| Cortex-M0 | ARMCC | 3.3k | 19469 / 12163 | 1248 / 1216 |
| Cortex-M0+ | | 3.3k | 19469 / 12163 | 1248 / 1216 |
| Cortex-M3 | | 3.1k | 18721 / 11719 | 1248 / 1216 |
| Cortex-M4 | | 3.1k | 18721 / 11719 | 1248 / 1216 |
| Cortex-M4_FPU | | 3.1k | 19767 / 12655 | 1248 / 1216 |
| Cortex-M7 | | 3.1k | 18749 / 11735 | 1248 / 1216 |
| Cortex-M0 | GCC | 3.6k | 22932 / 13764 | 1248 / 1216 |
| Cortex-M0+ | | 3.6k | 22932 / 13764 | 1248 / 1216 |
| Cortex-M3 | | 3.7k | 21036 / 12288 | 1248 / 1216 |
| Cortex-M33 | | 3.7k | 21044 / 12288 | 1248 / 1216 |
| Cortex-M33F | | 6.1k | 37182 / 23988 | 1248 / 1216 |
| Cortex-M4 | | 3.7k | 20944 / 12328 | 1248 / 1216 |
| Cortex-M4_FPU | | 3.7k | 21132 / 12444 | 1248 / 1216 |
| Cortex-M7 | | 3.8k | 21216 / 12400 | 1248 / 1216 |
| ARMv8-m | | 3.5k | 22796 / 13924 | 1248 / 1216 |

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|-----------------|--------------------------|-------|---------------|-------------|
| Cortex-A7 | | 3.8k | 21828 / 12912 | 1248 / 1216 |
| AVR8bit-MegaAVR | AVR-GCC | 7.8k | 45000 / 27776 | 1192 / 1176 |
| AVR8bit-XMEGA | | 7.7k | 44212 / 27572 | 1192 / 1176 |
| AVR 32bit | | 4.4k | 24410 / 13786 | 1588 / 1556 |
| ESP32 | Elf-gcc | 4.1k | 24446 / 14710 | 1248 / 1216 |
| ESP8266 | | 4.7k | 27954 / 17003 | 1248 / 1216 |
| Msp430 | | 5.5k | 34916 / 21590 | 1198 / 1182 |
| Raspberry-pi0 | Arm-linux-gnueabi-hf-gcc | 10.2k | 57648 / 35568 | 1248 / 1216 |
| Raspberry-pi3 | | 10.1k | 57816 / 35740 | 1248 / 1216 |
| Cortex-M0 | IAR7 | 3.5k | 21276 / 12944 | 1248 / 1216 |
| Cortex-M0+ | | 3.5k | 21276 / 12944 | 1248 / 1216 |
| Cortex-M3 | | 3.5k | 20902 / 12536 | 1248 / 1216 |
| Cortex-M4 | | 3.5k | 20918 / 12552 | 1248 / 1216 |
| Cortex-M4_FPU | | 3.5k | 21458 / 13062 | 1248 / 1216 |
| Cortex-M7 | | 3.5k | 20918 / 12552 | 1248 / 1216 |
| Cortex-M0 | IAR8 | 3.5k | 21414 / 12952 | 1248 / 1216 |
| Cortex-M0+ | | 3.5k | 21414 / 12952 | 1248 / 1216 |
| Cortex-M3 | | 3.5k | 20780 / 12426 | 1248 / 1216 |
| Cortex-M4 | | 3.5k | 20776 / 12420 | 1248 / 1216 |
| Cortex-M4_FPU | | 3.5k | 21224 / 12858 | 1248 / 1216 |
| Cortex-M7 | | 3.5k | 20776 / 12420 | 1248 / 1216 |
| Windows_x64 | Windows-GCC | 5.4k | 36120 / 21428 | 1248 / 1216 |
| Windows_x86 | | 5.6k | 33512 / 18920 | 1248 / 1216 |
| Linux_x64 | Linux-GCC | 5.6k | 39535 / 20609 | 1248 / 1216 |
| Linux_x86 | | 5.8k | 49266 / 24871 | 1228 / 1200 |

*Note: ROM/RAM size is basic requirement of BSEC. File size doesn't count.