

## BSEC Binary Size Information

**BSEC version: 1.4.9.2**

### 1. Platform Supported Currently

Platform	Compiler	TYPE
Cortex-ARM	Keil5 ARMCC	Cortex-M0, M0+, M3, M4, M4F, M7
Cortex-ARM	arm-none-eabi-gcc	Cortex-M0, M0+, M3, M33, M33F, M4, M4F, M7
Cortex-A*	arm-none-eabi-gcc	Cortex-A7, Cortex-A73
AVR_8bit	Atmel Studio AVR-GCC	MegaAVR, XMEGA
AVR_32bit	Atmel Studio AVR-GCC	32-bit AVR UC3
ESP	xtensa-lx106-elf-gcc	ESP8266, ESP32
MSP430	msp430-elf-gcc	MSP430
IAR	IAR compiler	Cortex-M0, M0+, M3, M4, M4F, M7
Raspberry pi	Arm-linux-gnueabi-hf-gcc	Pi0-armv6 32bits, pi3-armv8-a 64bits
Windows	TDM-GCC	x86, x64
Linux	GCC	x86, x64
MacOS	Clang LLVM GCC	x64

### 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	Keil5 ARMCC	5.2k	19403/12215	1280/1256
Cortex-M0+		5.2k	19403/12215	1280/1256
Cortex-M3		5.2k	18329/11539	1280/1256
Cortex-M4		5.2k	18329/11539	1280/1256
Cortex-M4F		5.1k	19403/12537	1280/1256
Cortex-M7		5.2k	18375/11555	1280/1256
Cortex-M0	arm-none-eabi-gcc	6.2k	23675/14415	1280/1256
Cortex-M0+		6.2k	23675/14415	1280/1256
Cortex-M3		6.1k	21239/12627	1280/1256
Cortex-M33		6.1k	21251/12631	1280/1256
Cortex-M33F		5.9k	35252/22714	1280/1256
Cortex-M4		6.1k	21231/12671	1280/1256
Cortex-M4F		5.9k	21511/12843	1280/1256

Cortex-M7		5.8k	21443/12735	1280/1256
ARMv8-m		6.2k	23675/14547	1280/1256
Cortex-A73		6.9k	25463/14811	1288/1256
Cortex-A7		6.0k	21859/13239	1280/1256
AVR8bit-MegaAVR	Atmel Studio AVR-GCC	11.0k	45968/29018	1224/1208
AVR8bit-XMEGA		10.9k	45204/28830	1224/1208
AVR 32bit		7.1k	24456/14230	1620/1588
ESP32	Elf-gcc	6.7k	25631/15404	1288/1256
ESP8266		8.3k	28742/17739	1288/1256
Msp430		8.6k	35584/22250	1230/1214
Raspberry-pi0	Arm-linux- gnueabi-hf-gcc	15.9k	55212/33960	1288/1256
Raspberry-pi3		15.8k	55284/34036	1288/1256
Cortex-M0	IAR7	6.0k	21108/12918	1280/1256
Cortex-M0+		6.0k	21108/12918	1280/1256
Cortex-M3		6.0k	20946/12588	1280/1256
Cortex-M4		6.0k	20946/12588	1280/1256
Cortex-M4F		5.9k	21312/12906	1280/1256
Cortex-M7		6.0k	20946/12588	1280/1256
Cortex-M0	IAR8	6.0k	21228/12946	1280/1256
Cortex-M0+		6.0k	21228/12946	1280/1256
Cortex-M3		6.1k	20788/12560	1280/1256
Cortex-M4		6.1k	20784/12556	1280/1256
Cortex-M4F		5.9k	21102/12806	1280/1256
Cortex-M7		6.1k	20784/12556	1280/1256
Windows_x64	TDM-GCC	9.0k	36356/21564	1312/1280
Windows_x86		8.4k	33344/19176	1312/1280
Linux_x64	GCC	9.5k	40519/21403	1288/1256
Linux_x86		10.4k	50207/25581	1264/1236

\*Note:

1. ROM/RAM size is basic requirement of BSEC. Static Lib File size doesn't count.
2. M4F/M33F means the MCU with FPU.