

BSEC Binary Size Information

BSEC version: 2.4.0.0

1. Platform Supported Currently

Platform	Compiler	TYPE
Cortex-M	Keil5 ARMCC	Cortex-M0, M0+, M3, M4, M4F, M7
Cortex-M	arm-none-eabi-gcc	Cortex-M0, M0+, M3, M33, M33F, M4, M4F, M7, ARMv8-m
Cortex-A	arm-none-eabi-gcc	Cortex-A7, 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 , ESP32-S2, ESP32-S3
	riscv32-esp-elf-gcc	ESP32-C2, ESP32-C3
MSP430	msp430-elf-gcc	MSP430
IAR	IAR compiler	Cortex-M0, M0+, M3, M4, M4F, M7
Raspberry pi	Arm-linux-gnueabi-hf-gcc	Pi 3 armv6, Pi 3 armv8-a
	Aarch64-linux-gnu-gcc	Pi 4 armv8-a
Windows	TDM-GCC	x86, x64
Linux	GCC	x86, x64

2. Binary Size on different platform

Platform Type	Compiler	ROM(.text+.data) in bytes	RAM(.data+.bss) in bytes
Cortex-M0	Keil5 ARMCC v5.29	24648	3720
Cortex-M0+		24648	3720
Cortex-M3		23392	3720
Cortex-M4		23392	3720
Cortex-M4F		24950	3720
Cortex-M7		23398	3720
Cortex-M0	arm-none-eabi-gcc v5.4.1	30393	3720
Cortex-M0+		30393	3720
Cortex-M3		27317	3720
Cortex-M33		27337	3720

Cortex-M33F		27574	3720
Cortex-M4		27293	3720
Cortex-M4F		27869	3720
Cortex-M7		27669	3720
ARMv8-m		30029	3720
Cortex-A7		27973	3720
Cortex-A73		32593	3736
AVR8bit-MegaAVR	Atmel Studio AVR-GCC v7.0.2397	58608	3664
AVR8bit-XMEGA		57598	3664
AVR 32bit		31404	4188
ESP32	xtensa-esp32-elf-gcc v4.8.5	32942	3736
ESP32-S2	xtensa-esp32s2-elf-gcc v11.2.0	34016	3736
ESP32-S3	xtensa-esp32s3-elf v11.2.0	32208	3736
ESP32-C2/C3	riscv32-esp-elf-gcc v11.2.0	37713	3736
ESP8266	xtensa-lx106-elf-gcc v4.8.2	36181	3736
Msp430	msp430-elf-gcc v8.3.1	46412	3676
PiThree_Armv6	Arm-linux-gnueabi-hf-gcc v4.9.3	71796	3736
PiThree_Armv8-a		71932	3736
PiFour_Armv8-a	Aarch64-linux-gnu-gcc v9.4.0	43638	3736
Cortex-M0	IAR7 v7.7	27100	3720
Cortex-M0+		27100	3720
Cortex-M3		26854	3720
Cortex-M4		26854	3720
Cortex-M4F		27314	3720
Cortex-M7		26854	3720
Cortex-M0	IAR8 v8.4	27162	3720
Cortex-M0+		27162	3720
Cortex-M3		26558	3720
Cortex-M4		26558	3720

Cortex-M4F		27178	3720
Cortex-M7		26558	3720
Windows_x64	TDM-GCC v5.1.0	46484	3776
Windows_x86		43812	3776
Linux_m64	GCC v9.3.0	52700	3752
Linux_m32		65814	3724

*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.