

BSEC Binary Size Information

BSEC version: 2.5.0.2

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-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	26034	3888
Cortex-M0+		26034	3888
Cortex-M3		24726	3888
Cortex-M4		24726	3888
Cortex-M4F		26368	3888
Cortex-M7		24734	3888
Cortex-M0	arm-none-eabi-gcc v5.4.1	32457	3888
Cortex-M0+		32457	3888
Cortex-M3		29021	3888
Cortex-M33		29041	3888

Cortex-M33F		29430	3888
Cortex-M4		29025	3888
Cortex-M4F		29689	3888
Cortex-M7		29557	3888
ARMv8-m		32033	3888
Cortex-A7		30117	3888
Cortex-A73		34457	3896
AVR8bit-MegaAVR	Atmel Studio AVR-GCC	63640	3825
AVR8bit-XMEGA		62616	3825
AVR 32bit		v7.0.2397 33172	4424
ESP32	xtensa-esp32-elf-gcc v4.8.5	35190	3896
ESP32-S2	xtensa-esp32s2-elf-gcc v11.2.0	36646	3896
ESP32-S3	xtensa-esp32s3-elf v11.2.0	34299	3896
ESP32-C2/C3	riscv32-esp-elf-gcc v11.2.0	39937	3896
ESP8266	xtensa-lx106-elf-gcc v4.8.2	38540	3896
Msp430	msp430-elf-gcc v8.3.1	48994	3836
PiThree_Armv6	Arm-linux-gnueabi-hf-gcc	75212	3896
PiThree_Armv8-a		v4.9.3 75868	3896
PiFour_Armv8-a	Aarch64-linux-gnu-gcc v9.4.0	46474	3896
Cortex-M0	IAR7 v7.7	28596	3888
Cortex-M0+		28596	3888
Cortex-M3		28228	3888
Cortex-M4		28224	3888
Cortex-M4F		28708	3888
Cortex-M7		28224	3888
Cortex-M0		IAR8 v8.4	28670
Cortex-M0+	28670		3888
Cortex-M3	27852		3888
Cortex-M4	27852		3888

Cortex-M4F		28496	3888
Cortex-M7		27852	3888
Windows_x64	TDM-GCC	49108	3936
Windows_x86	v5.1.0	46468	3936
Linux_m64	GCC	55145	3912
Linux_m32	v11.4.0	67502	3888

*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.