BSEC Binary Size Information

BESC version: 3.2.0.0

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-gnueabihf-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 IAQ_Sel/IAQ	RAM(.data+.bss) in bytes IAQ_Sel /IAQ
Cortex-M0	Keil5.29 ARMCC v5.29	28958/23252	3928/1328
Cortex-M0+		28958/23252	3928/1328
Cortex-M3		27490/22084	3928/1328
Cortex-M4		27490/22084	3928/1328
Cortex-M4F		29304/23578	3928/1328
Cortex-M7		27490/22088	3928/1328
Cortex-M0	arm-none-eabi-gcc v9.2.1	34921/27641	3928/1328
Cortex-M0+		34921/27641	3928/1328
Cortex-M3		31793/25401	3928/1328

Cortex-M33		31813/25405	3928/1328
Cortex-M33F		32400/25232	3928/1328
Cortex-M4		31749/25345	3928/1328
Cortex-M4F		32516/25312	3928/1328
Cortex-M7		32313/25645	3928/1328
ARMv8		34505/27641	3928/1328
Cortex-A7		32769/26101	3928/1328
Cortex-A73		38197/30605	3928/1336
AVR8bit-MegaAVR	Atmel Studio AVR-GCC v7.0.2397	69019/54039	3851/1256
AVR8bit-XMEGA		67845/53133	3851/1256
AVR32		36580/29488	4460/1692
ESP32	xtensa-esp32-elf-gcc v4.8.5	37155/29558	3928/1336
ESP32-S2	xtensa-esp32s2-elf-gcc v11.2.0	39599/31172	3928/1336
ESP32-S3	xtensa-esp32s3-elf v11.2.0	36908/29053	3928/1336
ESP32-C2/C3	riscv32-esp-elf-gcc v11.2.0	43809/34821	3928/1336
ESP8266	xtensa-lx106-elf-gcc v4.8.2	42106/33610	3928/1336
MSP430_GCC_OUT	msp430-elf-gcc v8.3.1	53308/42328	3864/1266
PiThree_Armv6	Arm-linux-gnueabihf-gcc v4.9.3	82872/66452	3928/1336
PiThree_Armv8		83480/67008	3928/1336
PiFour_Armv8	Aarch64-linux-gnu-gcc V11.3	52484/42464	3928/1336
Cortex-M0	IAR7 v7.80.4.12462	31378/25214	3928/1328
Cortex-M0+		31378/25214	3928/1328
Cortex-M3		31116/25150	3928/1328
Cortex-M4		31120/25150	3928/1328
Cortex-M4F		31732/25746	3928/1328
Cortex-M7		31120/25150	3928/1328
Cortex-M0	IAR8 V8.40.1.212	31636/25466	3928/1328
Cortex-M0+		31636/25466	3928/1328
Cortex-M3		30784/24882	3928/1328

Cortex-M4		30784/24882	3928/1328
Cortex-M4F		31548/25506	3928/1328
Cortex-M7		30784/24882	3928/1328
Windows_x64	TDM-GCC	53952/43536	3968/1344
Windows_x86	v5.3.0	51112/40592	3968/1344
Linux_m64	GCC	61087/49205	3944/1336
Linux_m32	V11.4.0	73867/58634	3920/1304

*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.