BSEC Binary Size Information

BSEC version: 2.6.1.0

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 v5.06	28836/23114	3888/1288
Cortex-M0+		28836/23114	3888/1288
Cortex-M3		27482/21838	3888/1288
Cortex-M4		27482/21838	3888/1288
Cortex-M4F		29438/23358	3888/1288
Cortex-M7		27482/21842	3888/1288
Cortex-M0	arm-none-eabi-gcc v9.2.1	34849/27297	3888/1288
Cortex-M0+		34849/27297	3888/1288
Cortex-M3		31677/25081	3888/1288

Cortex-M33		31697/25085	3888/1288
Cortex-M33F		32254/24846	3888/1288
Cortex-M4		31625/25001	3888/1288
Cortex-M4F		32390/24938	3888/1288
Cortex-M7		32109/25249	3888/1288
ARMv8-m		34413/27393	3888/1288
Cortex-A7		32609/25713	3888/1288
Cortex-A73		38113/30301	3888/1296
AVR8bit-MegaAVR	Atmel Studio AVR-GCC v7.0.2397	69179/53811	3811/1216
AVR8bit-XMEGA		67993/52895	3811/1216
AVR 32bit		36586/29226	4420/1652
ESP32	xtensa-esp32-elf-gcc v4.8.5	37320/29427	3888/1296
ESP32-S2	xtensa-esp32s2-elf-gcc v11.2.0	39802/31034	3888/1296
ESP32-S3	xtensa-esp32s3-elf v11.2.0	37043/28844	3888/1296
EPS32-C2/C3	riscv32-esp-elf-gcc v11.2.0	43733/34357	3888/1296
ESP8266	xtensa-lx106-elf-gcc v4.8.2	42222/33357	3888/1296
Msp430	msp430-elf-gcc v8.3.1	53404/41992	3824/1226
PiThree_Armv6	Arm-linux-gnueabihf-gcc v4.9.3	83252/65972	3888/1296
PiThree_Armv8-a		83864/66512	3888/1296
PiFour_Armv8-a	Aarch64-linux-gnu-gcc V11.3	52534/42146	3888/1296
Cortex-M0	IAR7 v7.80.4.12462	31396/24952	3888/1288
Cortex-M0+		31396/24952	3888/1288
Cortex-M3		31142/24902	3888/1288
Cortex-M4		31150/24902	3888/1288
Cortex-M4F		31790/25462	3888/1288
Cortex-M7		31150/24902	3888/1288
Cortex-M0	IAR8 V8.40.1.212	31692/25248	3888/1288
Cortex-M0+		31692/25248	3888/1288
Cortex-M3		30820/24650	3888/1288

Cortex-M4		30820/24650	3888/1288
Cortex-M4F		31584/25194	3888/1288
Cortex-M7		30820/24650	3888/1288
Windows_x64	TDM-GCC	54076/43284	3936/1312
Windows_x86	v5.3.0	51024/40136	3936/1312
Linux_m64	GCC	61607/49198	3904/1296
Linux_m32	V11.4.0	74092/58473	3880/1264

*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.