2025

On-Bright Electronics MCU Selection Guide

Your Best Choice MCU Platform Provider

2025 – Dec.

MCU Product Lines

01 8051&PIC Based 8-bit for Easy Use

ARM® Cortex®-M0 32-bit for Smart 02

03 Motor Control for Anywhere

OB Solution & Applications 04

05 Development Tools

01

8051&PIC Based 8-bit for Easy Use

- 8-bit 8051 Flash MCU With Touch Key
- 8-bit 8051 Cost Effective MCU with Touch Key
- 8-bit 8051 Flash MCU With ADC
- 8-bit 8051 Cost Effective MCU With ADC & General-purpose
- 8-bit PIC Core Cost Effective MCU With ADC & General-purpose
- 8-bit PIC Core Cost Effective MCU With Touch key
- 8-bit 8051 Flash MCU With LCD Driver
- 8-bit 8051 Flash Standard MCU & USB Function

8051&PIC Based 8-bit for Easy Use

- 8-bit 8051 Flash MCU With Touch Key – OB39RxxT1/ OB39RxxT2 series
- 8-bit 8051 Cost Effective MCU with Touch Key – OB38A04T1/ OB38AxxT2/ OB38AxxT3B/ OB38RxxT1 series
- 8-bit 8051 Flash MCU With ADC – OB39RxxA3/ OB39RxxA5/ OB39RxxA6 series
- 8-bit 8051 Cost Effective MCU With ADC & General-purpose – OB38A08A1/A2/ OB38R08A1/ OB38S003~OB38S033 series
- 8-bit PIC Core Cost Effective MCU With ADC & General-purpose – OB36S01A1/ OB36A02A2 series
- 8-bit PIC Core Cost Effective MCU With Touch key – OB36A04T1 series
- 8-bit 8051 Flash MCU With LCD Driver – OB39A16D1/D2 series
- 8-bit 8051 Flash Standard MCU & USB Function – OB59A16G6/ OB59A16A5/ OB59A16U1 series

8-bit MCU Product Category

8051 & PIC Based 8-bit for Easy Use

High speed 1T – 8051 & PIC MCU

OB59 Series: Flash-ROM
OB39 Series: Flash-ROM
OB38 Series: MTP-ROM
OB37 Series: OTP-ROM
OB36 Series: MTP-ROM

Standard Series
OB59xxxx

Low Pin Count Series
OB39/38/37/36xxxx

ROM & RAM

- 4KB ~ 128KB Flash
- 2KB ~ 16KB MTP ROM
- 4KB OTP-ROM
- 64B ~ 6KB SRAM
- EEPROM
- ISP/IAP/ICP
- Advanced process
- Excellent encryption

Analog Module

- 10-bit ADC,900Ksps
- 12-bit ADC, 24-bit ADC
- OPA /Comparator
- RC Oscillator
- LED/LCD, Touch-key
- LDO/VREF
- LVR/LVI

Peripheral

- UART/I2C/SPI/USB
- PCA/PWM
- RTC
- WDT
- MDU
- ICE/On-chip debug

High reliability

- ESD
- EMI/EFT
- Operating voltage
  1.8~5.5V
- Operating Temp.
  -40 ~ +85℃

Package type

- 10-MSOP
- Up to 80-LQFP
- Standard type：
  DIP/SOP
  PLCC/QFP/LQFP
- RoHS

8-bit Flash MCU With Touch Key

8051 Based 8-bit for Easy Use

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Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Touch Key	Max. Speed (MHz)	LED Driver	
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits				COM	SEG
OB39R32T1W20SP	SOP20	18	40	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	6	25	3	8
OB39R32T1W24SP	SOP24	22	40	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	12
OB39R32T1W24GP	SSOP24	22	40	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	12
OB39R32T1W28SP	SOP28	26	40	1024	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	5	13
OB39R32T1W32VP	LQFP32	29	40	1024	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	16
OB39R62T1W20SP	SOP20	18	62	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	6	25	3	8
OB39R62T1W24SP	SOP24	22	62	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	12
OB39R62T1W24GP	SSOP24	22	62	1024	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	12
OB39R62T1W28SP	SOP28	26	62	1024	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	5	13
OB39R62T1W32VP	LQFP32	29	62	1024	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	8	25	7	16
OB39R32T2W20SP	SOP20	18	40	1408	22	4	v	2	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	17	25	4	13
OB39R32T2W24SP	SOP24	22	40	1408	22	4	v	1	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	21	25	6	15
OB39R32T2W24GP	SSOP24	22	40	1408	22	4	v	2	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	21	25	6	15
OB39R32T2W28SP	SOP28	26	40	1408	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	24	25	7	16
OB39R32T2W32VP	LQFP32	30	40	1408	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	24	25	7	16
OB39R62T2W20SP	SOP20	18	62	1408	22	4	v	2	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	17	25	4	13
OB39R62T2W24SP	SOP24	22	62	1408	22	4	v	1	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	21	25	6	15
OB39R62T2W24GP	SSOP24	22	62	1408	22	4	v	2	2	6	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	21	25	6	15
OB39R62T2W28SP	SOP28	26	62	1408	22	4	v	2	2	8	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	24	25	7	16
OB39R62T2W32VP	LQFP32	30	62	1408	22	4	v	2	2	9	12	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	24	25	7	16

8-bit Cost Effective MCU with Touch Key

8051 Based 8-bit for Easy Use

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Touch Key	Max. Speed (MHz)	LED Driver		EEPROM (B)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits				COM	SEG	
OB38A04T1W08OP	SOP8	5	5	320	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	3	16	-	-	128
OB38A04T1W10MP	MSOP10	7	5	320	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	7	16	-	-	128
OB38A04T1W14OP	SOP14	11	5	320	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	9	16	-	-	128
OB38A04T1W16OP	SOP16	13	5	320	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	10	16	-	-	128
OB38A04T1W20BP	QFN20	17	5	320	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	9	16	-	-	128
OB38A08T1W10MP	MSOP10	7	8	512	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	7	16	-	-	128
OB38A08T1W14OP	SOP14	11	8	512	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	9	16	-	-	128
OB38A08T1W16OP	SOP16	13	8	512	16	2	-	1	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ISP, ICP	10	16	-	-	128

8-bit Cost Effective MCU with Touch Key

8051 Based 8-bit for Easy Use

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Touch Key	Max. Speed (MHz)	LED Driver		EEPROM (B)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits				COM	SEG	
OB38A16T2W16OP	SOP16	13	16	1280	16	4	v	1	2	7	12	2.4 ~ 5.5	-40 ~ +85	3	10	ICP	8	16	5	7	128
OB38A16T2W20EP	TSSOP20	17	16	1280	16	4	v	1	2	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	13	16	3	13	128
OB38A16T2W20SP	SOP20	17	16	1280	16	4	v	1	2	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	13	16	3	13	128
OB38A16T2W24EP	TSSOP24	21	16	1280	16	4	v	1	2	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	13	16	7	13	128
OB38A16T2W24SP	SOP24	21	16	1280	16	4	v	1	2	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	13	16	7	13	128
OB38A16T2W28EP	TSSOP28	25	16	1280	16	4	v	1	2	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	16	16	7	16	128
OB38A16T2W28SP	SOP28	25	16	1280	16	4	v	1	2	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	16	16	7	16	128

8051 Based 8-bit for Touch Key Enhance CS

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Touch Key	Max. Speed (MHz)	LED Driver		EEPROM (B)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits				COM	SEG	
OB38A16T3BW16OP	SOP16	14	16	1280	16	4	v	2	2	14	12	2.4 ~ 5.5	-40 ~ +85	3	10	ICP	14	16	4	9	128
OB38A16T3BW20SP	SOP20	18	16	1280	16	4	v	2	2	18	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	16	16	5	12	128
OB38A16T3BW28SP	SOP28	26	16	1280	16	4	v	2	2	26	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	24	16	8	16	128
OB38A16T3BW28EP	TSSOP28	26	16	1280	16	4	v	2	2	26	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	24	16	8	16	128

8-bit Cost Effective MCU with Touch Key

8051 Based 8-bit for Easy Use

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Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Touch Key	Max. Speed (MHz)	LED Driver		EEPROM (B)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits				COM	SEG	
OB38R08T1W10GP	SSOP10	8	9	432	16	3	v	1	1	2	12	2.4 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	5	16	3	3	128
OB38R08T1W14OP	SOP14	12	9	432	16	3	v	1	1	7	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	7	16	3	7	128
OB38R08T1W16OP	SOP16	14	9	432	16	3	v	1	1	7	12	2.4 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	7	16	5	7	128
OB38R08T1W20EP	TSSOP20	18	9	432	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	3	13	128
OB38R08T1W20SP	SOP20	18	9	432	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	3	13	128
OB38R08T1W20DP	QFN20	18	9	432	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	11	16	5	11	128
OB38R08T1W24EP	TSSOP24	22	9	432	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	7	13	128
OB38R08T1W24SP	SOP24	22	9	432	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	7	13	128
OB38R08T1W28EP	TSSOP28	26	9	432	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	16	16	7	16	128
OB38R08T1W28SP	SOP28	26	9	432	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	16	16	7	16	128
OB38R16T1W10GP	SSOP10	8	16	768	16	3	v	1	1	2	12	2.4 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	5	16	3	3	128
OB38R16T1W14OP	SOP14	12	16	768	16	3	v	1	1	7	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	7	16	3	7	128
OB38R16T1W16OP	SOP16	14	16	768	16	3	v	1	1	7	12	2.4 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	7	16	5	7	128
OB38R16T1W20EP	TSSOP20	18	16	768	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	3	13	128
OB38R16T1W20SP	SOP20	18	16	768	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	3	13	128
OB38R16T1W20DP	QFN20	18	16	768	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	11	16	5	11	128
OB38R16T1W24EP	TSSOP24	22	16	768	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	7	13	128
OB38R16T1W24SP	SOP24	22	16	768	16	3	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	13	16	7	13	128
OB38R16T1W28EP	TSSOP28	26	16	768	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	16	16	7	16	128
OB38R16T1W28SP	SOP28	26	16	768	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	16	16	7	16	128
OB38S013W20EP	TSSOP20	18	16	768	16	3	v	1	1	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	11	16	5	11	128

8-bit Flash MCU With ADC

8051 Based 8-bit for Easy Use

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Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	Max. Speed (MHz)
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits			
OB39R08A5U10MP	MSOP10	8	8	256	22	3	-	1	-	1	8	10	1.8 ~ 5.5	-40 ~ +85	4	10	ICP	1	25
OB39R08A3U14OP	SOP14	12	8	512	22	3	v	1	1	1	2	10	1.8 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	1	25
OB39R08A3U16OP	SOP16	14	8	512	22	3	v	1	-	1	5	10	1.8 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	1	25
OB39R08A3U20GP	SSOP20	18	8	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R08A3U20EP	TSSOP20	18	8	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R08A3U20BP	QFN20	18	8	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R16A3U10MP	MSOP10	8	16	512	22	3	v	1	-	1	2	10	1.8 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	-	25
OB39R16A3U14OP	SOP14	12	16	512	22	3	v	1	1	1	2	10	1.8 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	1	25
OB39R16A3U16OP	SOP16	14	16	512	22	3	v	1	-	1	5	10	1.8 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	1	25
OB39R16A3U20GP	SSOP20	18	16	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R16A3U20EP	TSSOP20	18	16	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R16A3U20BP	QFN20	18	16	512	22	3	v	1	1	1	7	10	1.8 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25
OB39R16A6U24SP	SOP24	22	16	1280	22	3	v	1	1	1	8	10	1.8 ~ 5.5	-40 ~ +85	4	14	ISP, ICP	-	25
OB39R16A6U28SP	SOP28	26	16	1280	22	3	v	1	1	1	8	10	1.8 ~ 5.5	-40 ~ +85	4	14	ISP, ICP	-	25
OB39R16A6U32VP	LQFP32	30	16	1280	22	3	v	1	1	1	8	10	1.8 ~ 5.5	-40 ~ +85	4	14	ISP, ICP	-	25

8-bit Cost Effective MCU With ADC & General-purpose

8051 Based 8-bit for Easy Use

8-bit Cost Effective MCU With ADC & General-purpose

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	OPA	Max. Speed (MHz)	EEPROM (B)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits					
OB38A08A2W08OP	SOP8	6	8	256	8	4	v	1	1	4	12	2.4 ~ 5.5	-40 ~ +85	2	10	ICP	-	-	8	128
OB38A08A1W10MP	MSOP10	8	8	256	8	4	v	1	1	6	12	2.4 ~ 5.5	-40 ~ +85	2	10	ICP	-	1	8	128
OB38A08A1W16OP	SOP16	14	8	256	8	4	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	2	10	ICP	1	1	8	128
OB38A08A1W20EP	TSSOP20	18	8	256	8	4	v	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	2	10	ICP	2	1	8	128

8-bit Cost Effective MCU With ADC & General-purpose

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	Max. Speed (MHz)	EEPROM (B)
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits				
OB38R08A1W08OP	SOP8	6	8	512	16	3	v	-	-	1	3	12	2.4 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	-	16	128
OB38R08A1W10MP	MSOP10	8	8	512	16	3	v	1	-	1	4	12	2.4 ~ 5.5	-40 ~ +85	1	10	ISP, ICP	1	16	128
OB38R08A1W14OP	SOP14	12	8	512	16	3	v	1	-	1	3	12	2.4 ~ 5.5	-40 ~ +85	2	10	ISP, ICP	1	16	128
OB38R08A1W16OP	SOP16	14	8	512	16	3	v	1	-	1	5	12	2.4 ~ 5.5	-40 ~ +85	3	10	ISP, ICP	1	16	128
OB38R08A1W20SP	SOP20	18	8	512	16	3	v	1	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	16	128
OB38R08A1W20GP	SSOP20	18	8	512	16	3	v	1	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	16	128
OB38R08A1W20BP	QFN20	18	8	512	16	3	v	1	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	16	128

8-bit Cost Effective MCU With ADC & General-purpose

8051 Based 8-bit for Easy Use

8-bit Cost Effective MCU With ADC & General-purpose

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	Max. Speed (MHz)	LED Driver		EEPROM (B)
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits				COM	SEG	
OB38S003W20EP	TSSOP20	18	8	512	16	3	v	1	1	1	8	12	2.4 ~ 5.5	-40 ~ +85	4	10	ISP,ICP	2	16	-	-	128
OB38S023W20EP	TSSOP20	18	16	1280	16	4	v	1	-	2	9	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	-	16	6	11	128
OB38S033W20EP	TSSOP20	18	16	512	16	3	-	2	-	1	16	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	-	16	-	-	128
OB38S033W20BP	QFN20	18	16	512	16	3	-	2	-	1	16	12	2.4 ~ 5.5	-40 ~ +85	4	10	ICP	-	16	-	-	128

8-bit OTP MCU With ADC & General-purpose

8051 Based 8-bit for Easy Use

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Max. Speed (MHz)
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits		
OB37R04G1W10MP	MSOP10	8	4	128	24	2	-	-	-	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24
OB37R04G1W14OP	SOP14	12	4	128	24	2	-	-	-	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24
OB37R04G1W16OP	SOP16	14	4	128	24	2	-	-	-	1	-	-	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24
OB37R04A1W10MP	MSOP10	8	4	128	24	3	v	-	-	1	4	10	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24
OB37R04A1W14OP	SOP14	12	4	128	24	3	v	-	-	1	6	10	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24
OB37R04A1W16OP	SOP16	14	4	128	24	3	v	-	-	1	8	10	2.4 ~ 5.5	-40 ~ +85	-	-	ICP	24

8-bit PIC core Cost Effective MCU

PIC Core Based 8-bit for Easy Use

8-bit PIC Core Cost Effective MCU With ADC & General-purpose

Part No.	Package	I/O	ROM (B)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	ISP/ICP	PWM		Ext-Interrupt (IOC)	Max. Speed (MHz)	EEPROM (B)
						8bit	PCA	UART	I2C	CH	Bits				CH	Bits			
OB36S01A1W10MP	MSOP10	8	1K*13	64	8	2	-	1	-	4	12	2.2 ~ 5.5	-40 ~ +85	ICP	-	-	4	8	24
OB36S01A1W08OP	SOP8	6	1K*13	64	8	2	-	1	-	4	12	2.2 ~ 5.5	-40 ~ +85	ICP	-	-	2	8	24
OB36A02A2W08OP	SOP8	6	2K*16	256	16	2	-	-	1	6	12	2.2 ~ 5.5	-40 ~ +85	ICP	4	10	2	16	128
OB36A02A2W16OP	SOP16	14	2K*16	256	16	2	-	-	1	14	12	2.2 ~ 5.5	-40 ~ +85	ICP	4	10	2	16	128

8-bit PIC Core Cost Effective MCU With Touch key

Part No.	Package	I/O	ROM (B)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	ISP/ICP	PWM		Touch key	Max. Speed (MHz)	EEPROM (B)
						16bit	8bit	UART	I2C	CH	Bits				CH	Bits			
OB36A04T1W16OP	SOP16	14	4K*16	512	16	1	1	-	-	14	12	2.2 ~ 5.5	-40 ~ +85	ICP	4	10	8	16	128

8-bit Flash MCU With LCD Driver

8051 Based 8-bit for Easy Use

Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	Max. Speed (MHz)	RTC	LCD
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits					
OB39A16D1W48VP	LQFP48	41	16	512	22	3	v	-	1	1	7	10	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	1	25	v	4x27
OB39A16D2W48VP	LQFP48	41	16	512	22	3	v	1	1	1	7	10	2.2 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	-	25	v	4x27

8-bit Flash Standard MCU & USB Function

8051 Based 8-bit for Easy Use

Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		ISP/ICP	Comparator	Max. Speed (MHz)	RTC	USB
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits					
OB59A16U1U48VP	LQFP48	38	64	6400	22	3	v	2	1	1	8	10	2.2 ~ 5.5	-40 ~ +85	8	14	ISP, ICP	2	25	-	2.0
OB59R16G6W44QP	QFP44	42	64	1280	22	3	v	1	1	1	-	-	2.7 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	-	25	-	-
OB59R16G6W48VP	LQFP48	46	64	1280	22	3	v	1	1	1	-	-	2.7 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	-	25	-	-
OB59R16A5L44QP	QFP44	42	64	2304	24	3	v	2	1	1	8	10	2.7 ~ 3.6	-40 ~ +85	4	10	ISP, ICP	2	25	v	-
OB59R16A5L48VP	LQFP48	46	64	2304	24	3	v	2	1	1	8	10	2.7 ~ 3.6	-40 ~ +85	4	10	ISP, ICP	2	25	v	-
OB59R16A5C44QP	QFP44	42	64	2304	24	3	v	2	1	1	8	10	4.5 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25	v	-
OB59R16A5C48VP	LQFP48	46	64	2304	24	3	v	2	1	1	8	10	4.5 ~ 5.5	-40 ~ +85	4	10	ISP, ICP	2	25	v	-

02

ARM® Cortex®-M0 32-bit for Smart

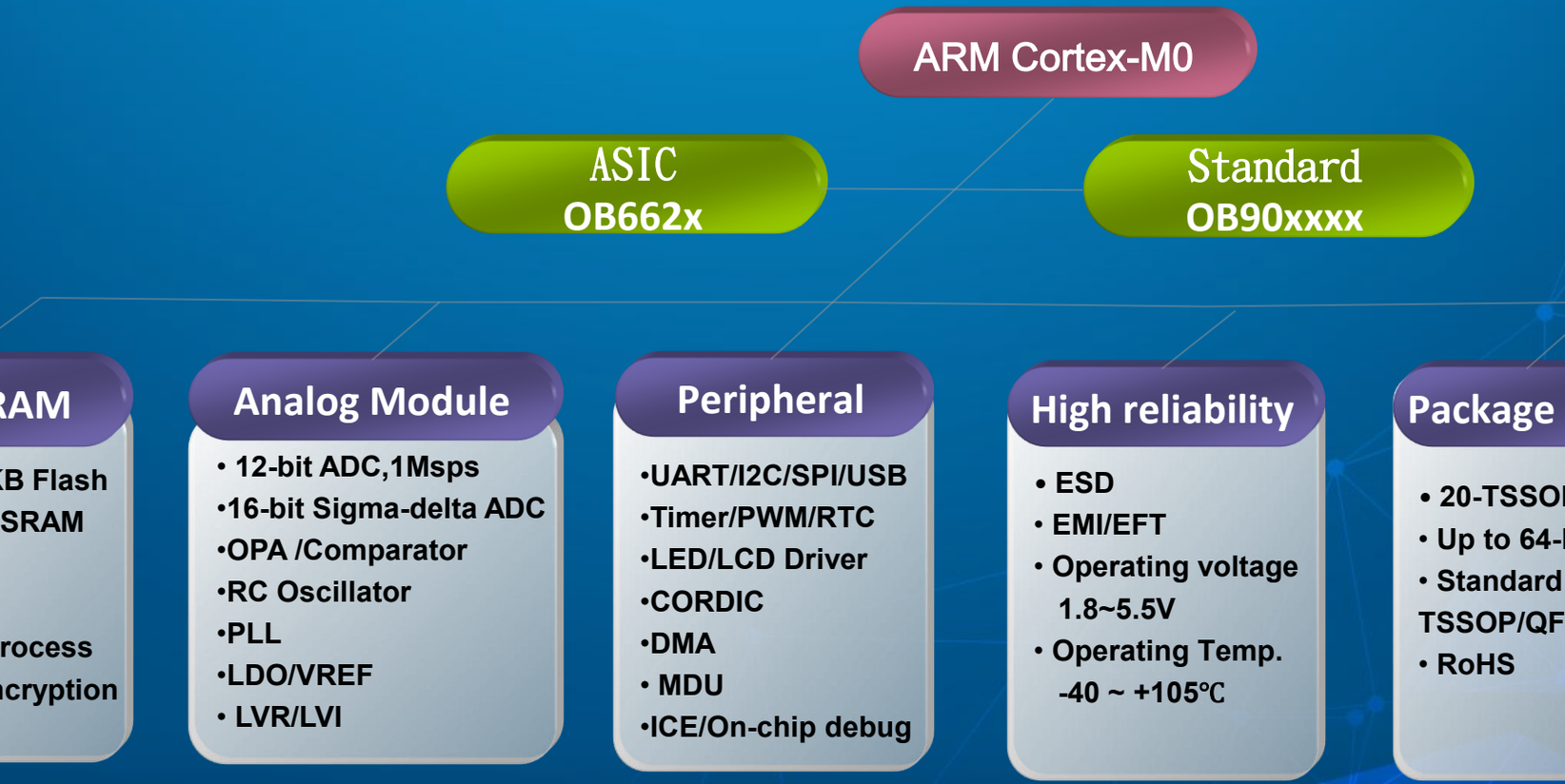
- 32-bit Flash MCU With ADC
- 32-bit Flash MCU With USB

ARM® Cortex®-M0 32-bit for Smart

- 32-bit Flash MCU With ADC – OB90RxxA1~A3/ OB90A128A1/ OB90A256A1 series
- 32-bit Flash MCU With USB – OB90A64U1 series

32-bit MCU Product Category

ARM® Cortex®-M0 32-bit for Smart



32-bit Flash MCU With ADC

ARM® Cortex®-M0 32-bit for Smart

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Part No.	Package	I/O	Flash (KB)	RAM (KB)	Max. Speed (MHz)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Int. Vref	Comparator	MDU
						32bit	16bit	RTC	UART	SPI	I2C	CH	Bits			CH	Bits			
OB90R32A1U20EP	TSSOP20	17	32	4	50	2	2	-	2	1	2	4	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	2	v
OB90R32A1U32CP	QFN32	29	32	4	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R32A1U32VP	LQFP32	29	32	4	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R64A1U20EP	TSSOP20	17	64	8	50	2	2	-	2	1	2	4	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	2	v
OB90R64A1U32CP	QFN32	29	64	8	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R64A1U32VP	LQFP32	29	64	8	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R32A2U20EP	TSSOP20	18	32	4	50	2	2	-	2	1	2	4	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	2	v
OB90R32A2U32CP	QFN32	30	32	4	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R32A2U32VP	LQFP32	30	32	4	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R64A2U20EP	TSSOP20	18	64	8	50	2	2	-	2	1	2	4	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	2	v
OB90R64A2U32CP	QFN32	30	64	8	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R64A2U32VP	LQFP32	30	64	8	50	2	2	-	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	v
OB90R128A3U28EP	TSSOP28	25	128	8	72	-	2	v	2	2	2	13	12	1.8 ~ 5.5	-40 ~ +105	4	16	v	-	-

32-bit Flash MCU With ADC

ARM® Cortex®-M0 32-bit for Smart

Part No.	Package	I/O	Flash (KB)	RAM (KB)	Max. Speed (MHz)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Int. Vref	Comparator	MDU	CORDIC	QEI
						32bit	16bit	RTC	UART	SPI	I2C	CH	Bits			CH	Bits					
OB90A128A1U48VP	LQFP48	43	128	16	50	2	2	v	2	1	2	16	12	1.8 ~ 5.5	-40 ~ +105	12	16	v	4	v	v	v
OB90A128A1U64VP	LQFP64	58	128	16	50	2	2	v	2	1	2	16	12	1.8 ~ 5.5	-40 ~ +105	12	16	v	4	v	v	v

ARM® Cortex®-M0 32-bit for Smart

Part No.	Package	I/O	Flash (KB)	RAM (KB)	Max. Speed (MHz)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Int. Vref	Comparator	DMA	CRC	AES (128Bit)	LCD (COMxSEG)
						32bit	16bit	RTC	UART	SPI	I2C	CH	Bits			CH	Bits						
OB90A256A1U64VP	LQFP64	59	256	32	33	2	3	-	6	4	1	8	16	1.8 ~ 5.5	-40 ~ +105	6	24	v	2	v	v	v	8x17
OB90A256A1U80LP	LQFP80	69	256	32	33	2	3	v	6	4	1	8	16	1.8 ~ 5.5	-40 ~ +105	6	24	v	2	v	v	v	8x24

32-bit Flash MCU With USB

ARM® Cortex®-M0 32-bit for Smart

Part No.	Package	I/O	Flash (KB)	RAM (KB)	Max. Speed (MHz)	Timer			Peripheral				ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		DMA	USB 2.0 (Full speed)
						32bit	16bit	RTC	UART	SPI	I2C	I2S	CH	Bits			CH	Bits		
OB90A64U1U48VP	LQFP48	40	64	32	72	1	5	v	3	3	2	1	10	12	1.8 ~ 5.5	-40 ~ +105	6	16	4	v

03

Motor Control for Anywhere

- BLDC/PMSM Motor Controller
- BLDC/PMSM Solution

Motor Control for Anywhere

- 8-bit Flash BLDC/PMSM Controller – OB39A16M1/ OB39A16M2/ OB39A32M1 series
- 8-bit BLDC/PMSM Controller with Hardware FOC Algorithm – OB6631 series
- 32-bit Flash BLDC/PMSM Controller with FOC Algorithm – OB90AxxM1/ OB90AxxM2 series
- 8-bit BLDC/PMSM Controller Build-in Gate driver, Up to DC 150V – OB661x series
- 8-bit BLDC/PMSM Controller with Hardware FOC Build-in Gate driver, Up to DC 650V – OB663x series
- 32-bit BLDC/PMSM Controller with FOC Algorithm and Build-in Gate driver, Up to DC 150V – OB662x series

BLDC/PMSM Motor Controller

Motor Control for Anywhere

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8-bit Flash BLDC/PMSM Controller

Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		ISP/ICP	Comparator	OPA
						16bit	PCA	UART	SPI	I2C	CH	Bits			CH	Bits			
OB39A16M1U16SP	SOP16	14	16	1280	22	2	v	1	1	1	2	10	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	3	-
OB39A16M1U20SP	SOP20	18	16	1280	22	2	v	1	1	1	6	10	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	3	-
OB39A16M1U32VP	LQFP32	30	16	1280	22	2	v	1	1	1	8	10	1.8 ~ 5.5	-40 ~ +85	8	14	ISP, ICP	3	-
OB39A16M2U20EP	TSSOP20	18	16	768	24	3	v	1	-	1	16	12	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	2	1
OB39A16M2U32VP	LQFP32	30	16	768	24	3	v	1	-	1	16	12	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	2	1
OB39A32M1U32VP	LQFP32	30	32	1280	24	4	v	1	-	1	13	12	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	3	1
OB39A32M1U32CP	QFN32	30	32	1280	24	4	v	1	-	1	13	12	1.8 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	3	1

8-bit BLDC/PMSM Controller with Hardware FOC Algorithm

Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		ISP/ICP	Comparator	OPA	CRC8	HW FOC PWM (KHZ)
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits					
OB6631VKP	TSSOP24	22	16	1280	16	2	v	1	1	6	12	2.4 ~ 5.5	-40 ~ +85	6	14	ISP, ICP	3	3	v	50

BLDC/PMSM Motor Controller

Motor Control for Anywhere

32-bit Flash BLDC/PMSM Controller with FOC Algorithm

Part No.	Package	I/O	Flash (KB)	RAM (KB)	IRC (MHz)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Int. Vref	Comparator	OPA	CORDIC	QEI
						32bit	16bit	RTC	UART	SPI	I2C	CH	Bits			CH	Bits					
OB90A32M1U48VP	LQFP48	46	32	4	50	2	2	v	2	1	2	12	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	4	v	v
OB90A64M1U48VP	LQFP48	46	64	8	50	2	2	v	2	1	2	12	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	4	v	v
OB90A32M2U32VP	LQFP32	30	32	4	50	2	2	v	2	1	2	5	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	4	v	v
OB90A32M3U32VP	LQFP32	30	32	4	72	1	2	-	1	1	1	13	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	3	v	-

8-bit MCU BLDC/PMSM Control Solution

Motor Control for Anywhere

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8-bit BLDC/PMSM Controller

V Build-in Gate driver, Up to DC 150V, Application for BLDC Motor

Part No.	Package	I/O	Flash (KB)	RAM(B)	IRC (MHz)	Timer	Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Build-In				HW Protection
						16bit	UART	SPI	I2C	CH	Bits			CH	Bits	LDO	Gate Driver	Comparator	OPA	
OB6610GNP	LQFP32	30	16	1280	22	3	1	1	1	8	10	1.8 ~ 5.5	-40 ~ +85	8	14	-	-	3	-	-
OB6710GNP	LQFP32	30	32	1280	24	4	1	-	1	13	12	1.8 ~ 5.5	-40 ~ +85	6	14	-	-	3	1	-
OB6710FNP	QFN32	30	32	1280	24	4	1	-	1	13	12	1.8 ~ 5.5	-40 ~ +85	6	14	-	-	3	1	-
OB6612GQP	LQFP48	20	16	1280	22	3	1	1	1	8	10	4.4 ~ 35	-40 ~ +85	6	14	v	40V	3	-	OCP/SCP/OVP/ ULVP
OB6613VKP	TSSOP24	14	16	768	24	3	1	-	1	13	10	4.4 ~ 35	-40 ~ +85	6	14	v	40V	3	1	OCP/SCP/OVP/ ULVP
OB6615FP	QFN52	20	16	1280	22	3	1	1	1	7	10	4.6 ~ 19	-40 ~ +85	6	14	v	65V	3	-	OCP/SCP/OVP/ ULVP
OB6616GP	LQFP44	20	16	1280	22	3	1	1	1	7	10	10 ~ 17	-40 ~ +85	6	14	v	85V	3	-	OCP/SCP/OVP/ ULVP
OB6617LGQP	LQFP48	20	16	1280	22	3	1	1	1	7	10	4.6 ~ 17	-40 ~ +85	6	14	v	65V	3	-	OCP/SCP/OVP/ ULVP
OB6617GP	LQFP48	20	16	1280	22	3	1	1	1	7	10	10 ~ 17	-40 ~ +85	6	14	v	85V	3	-	OCP/SCP/OVP/ ULVP
OB6617HGQP	LQFP48	20	16	1280	22	3	1	1	1	7	10	10 ~ 20	-40 ~ +85	6	14	v	150V	3	-	OCP/SCP/OVP/ ULVP
OB6619GQP	LQFP48	22	16	768	24	3	1	-	1	13	10	4.6 ~ 20	-40 ~ +85	6	14	v	70V	2	1	OCP/SCP/OVP/ ULVP
OB6619HGQP	LQFP48	22	16	768	24	3	1	-	1	13	10	10 ~ 20	-40 ~ +85	6	14	v	150V	2	1	OCP/SCP/OVP/ ULVP
OB6717FPP	QFN40	19	16	768	24	3	1	-	1	10	12	4.6 ~ 20	-40 ~ +85	6	14	v	70V	2	1	OCP/SCP/OVP/ ULVP

8-bit MCU BLDC/PMSM Control Solution

Motor Control for Anywhere

8-bit BLDC/PMSM Controller with Hardware FOC

V Build-in Gate driver, Up to DC 150V and Hardware FOC Algorithm

Part No.	Package	I/O	Flash (KB)	RAM(B)	IRC (MHz)	Timer	Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Build-In					HW Protection
						16bit	UART	SPI	I2C	CH	Bits			CH	Bits	LDO	HF	Gate Driver	Comparator	OPA	
OB6635VIP	TSSOP20	10	16	1280	16	2	v	1	1	4	12	10 ~ 17	-40 ~ +85	6	14	v	v	40V	3	1	OCP/SCP/OVP/ ULVP
OB6635VKP	TSSOP24	14	16	1280	16	2	v	1	1	5	12	10 ~ 17	-40 ~ +85	6	14	v	v	40V	3	3	OCP/SCP/OVP/ ULVP
OB6636FNP	QFN32	16	16	1280	16	2	v	1	1	6	12	10 ~ 20	-40 ~ +85	6	14	v	v	85V	3	3	OCP/SCP/OVP/ ULVP
OB6636HFNP	QFN32	16	16	1280	16	2	v	1	1	6	12	10 ~ 20	-40 ~ +85	6	14	v	v	150V	3	3	OCP/SCP/OVP/ ULVP

8-bit BLDC/PMSM Controller with Hardware FOC

V Build-in Gate driver, Up to DC 650V and Hardware FOC Algorithm

Part No.	Package	I/O	Flash (KB)	RAM(B)	IRC (MHz)	Timer	Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Build-In					HW Protection
						16bit	UART	SPI	I2C	CH	Bits			CH	Bits	LDO	HF	Gate Driver	Comparator	OPA	
OB6633GQP	LQFP48	16	16	1280	16	2	v	1	1	6	12	7.5 ~ 20	-40 ~ +85	6	14	-	v	650V	3	3	OCP/SCP/OVP/ ULVP

32-bit MCU BLDC/PMSM Control Solution

Motor Control for Anywhere

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32-bit BLDC/PMSM Controller with FOC Algorithm

V Build-in Gate driver, Up to DC 150V, Application for BLDC Motor

Part No.	Package	I/O	Flash (KB)	RAM (KB)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	MDU	Build-In				HW Protection
					32bit	16bit	RTC	UART	SPI	I2C	CH	Bits				LDO	OPA	Gate Driver	Comparator	
OB6625VIP	TSSOP20	10	32	4	1	2	-	1	1	1	5	12	10 ~ 17	-40 ~ +105	v	v	1	40V	2	OCP/SCP/OVP/ULVP
OB6625VKP	TSSOP24	14	32	4	1	2	-	1	1	1	6	12	10 ~ 17	-40 ~ +105	v	v	3	40V	3	OCP/SCP/OVP/ULVP
OB6625FLP	QFN28	19	32	4	1	2	-	1	1	1	9	12	10 ~ 17	-40 ~ +105	v	v	3	40V	3	OCP/SCP/OVP/ULVP
OB6626GQP	QFN64	31	64	8	2	2	V	2	1	1	8	12	10 ~ 17	-40 ~ +105	v	v	4	85V	4	OCP/SCP/OVP/ULVP
OB6627GPP	LQFP44	21	32	4	2	2	V	1	1	1	6	12	9 ~ 20	-40 ~ +105	v	v	3	85V	4	OCP/SCP/OVP/ULVP
OB6627GQP	LQFP48	23	32	4	2	2	V	1	1	1	8	12	9 ~ 20	-40 ~ +105	v	v	3	85V	4	OCP/SCP/OVP/ULVP
OB6627LGQP	LQFP48	23	32	4	2	2	V	1	1	1	8	12	4.4 ~ 20	-40 ~ +105	v	v	3	65V	4	OCP/SCP/OVP/ULVP
OB6627HGQP	LQFP48	23	32	4	2	2	V	1	1	1	8	12	7.5 ~ 20	-40 ~ +105	v	v	3	150V	4	OCP/SCP/OVP/ULVP
OB6628GQP	LQFP48	22	32	4	1	2	-	1	1	1	11	12	9 ~ 20	-40 ~ +105	v	v	3	85V	3	OCP/SCP/OVP/ULVP
OB6628LGQP	LQFP48	22	32	4	1	2	-	1	1	1	11	12	4.4 ~ 20	-40 ~ +105	v	v	3	70V	3	OCP/SCP/OVP/ULVP
OB6728SFPP	QFN40	22	32	8	1	2	-	1	1	1	13	12	9 ~ 20	-40 ~ +105	v	v	1	70V	3	OCP/SCP/OVP/ULVP
OB6728SFXP	QFN32	15	32	8	1	2	-	1	1	1	13	12	9 ~ 20	-40 ~ +105	v	v	1	70V	3	OCP/SCP/OVP/ULVP
OB6728HFXP	QFN32	16	32	8	1	2	-	1	1	1	13	12	9 ~ 20	-40 ~ +105	v	v	1	200V	3	OCP/SCP/OVP/ULVP

32-bit MCU BLDC/PMSM Control Solution

Motor Control for Anywhere

32-bit BLDC/PMSM Controller with FOC Algorithm

V Application for High or Low voltage BLDC Motor

Part No.	Package	I/O	Flash (KB)	RAM (KB)	Max. Speed (MHz)	Timer			Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Int. Vref	Comparator	OPA	CORDIC	QEI
						32bit	16bit	RTC	UART	SPI	I2C	CH	Bits			CH	Bits					
OB6620VLP	TSSOP28	26	32	4	50	2	2	v	2	1	2	8	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	2	-	-
OB6621GNP	LQFP32	30	32	4	50	2	2	v	2	1	2	7	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	4	v	-
OB6622GQP	LQFP48	46	32	4	50	2	2	v	2	1	2	12	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	4	v	v
OB6623GNP	LQFP32	30	32	4	72	2	1	-	1	1	1	13	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	3	3	v	-
OB6624FPP	QFN44	42	32	4	50	2	2	v	2	1	2	12	12	1.8 ~ 5.5	-40 ~ +105	6	16	v	4	4	v	v

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OB Solution & Applications

- 2.4G RF Wireless Controller & Module Board
- Li-Ion Power Bank Controller
- Ultra Voltage Home Appliance 8-bit Flash Controller
  - Induction Cooker Controller
  - Electric Heating Controller
  - Electric Scale 24bit Sigma-Delta ADC Controller
- Thermal Receipt Printer 32-bit USB Controller

OB Solution & Applications

- 2.4G RF Wireless Controller & Module Board – OB612x/ OBM612x series
- Li-Ion Power Bank Controller – OB2112 series
- Home Appliance 8-bit Flash Controller for Induction Cooker Controller – OB665x series
- Home Appliance 8-bit Flash Controller for Electric Heating Controller – OB55xx series
- Home Appliance 8-bit Flash Controller for Electric Scale 24bit Sigma-Delta ADC Controller – OB1021 series
- Thermal Receipt Printer 32-bit USB Controller – OB6632 series

2.4G RF Wireless Controller & Module Board

OB Solution & Applications

2.4G RF Wireless Controller

Part No.	Package	I/O	Flash (KB)	RAM (B)	IRC (MHz)	Timer	Peripheral			ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		Operating Frequency (MHz)	Transmisson rate (bps)
						16bit	UART	RSSI	I2C	CH	Bits			CH	Bits		
OB6121VP	TSSOP20	2	8	256	22	2	-	v	1	2	10	2.0 ~ 3.6	-40 ~ +85	2	10	2400 ~ 2483	250K/2M
OB6122VP	TSSOP20	8	16	512	22	3	1	v	1	4	10	2.0 ~ 3.6	-40 ~ +85	2	10	2400 ~ 2483	250K/2M
OB6122LVP	TSSOP20	12	16	512	22	3	1	v	1	7	10	2.0 ~ 3.6	-40 ~ +85	3	10	2400 ~ 2483	250K/2M
OB6123VP	TSSOP24	9	16	1280	22	2	1	v	1	-	-	2.0 ~ 3.6	-40 ~ +85	3	10	2400 ~ 2483	250K/2M
OB6125VP	TSSOP24	9	64	1280	22	3	1	v	1	-	-	2.0 ~ 3.6	-40 ~ +85	4	10	2400 ~ 2483	250K/2M

2.4G RF Wireless Module Board

Part No.	Package	Transmit power consumption (mA)	Application	Receive sensitivity (dBm)	Data rate (bps)	Frequency band (MHz)	Maximum transmit power	Receive power consumption (mA)	Voltage range (V)	Temperature range (˚C)
OBM6121	TSSOP20	32 @8dbm	2.4G 遥控器	-88 @1Mbps	250K/2M	2400 ~2483	8 dBm	20	2.0 ~ 3.6	-40 ~ +85
OBM6122L	TSSOP20	32 @8dbm	2.4G 无线调光	-88 @1Mbps	250K/2M	2400 ~2483	8 dBm	20	2.0 ~ 3.6	-40 ~ +85

Li-Ion Power Bank Controller

OB Solution & Applications

Li-Ion Power Bank Controller

Part No.	Package	I/O	Output Power	Buck/Boost Efficiency	Sleep Current (uA)	Timer	Peripheral		Operating Voltage (V)	Operating Temp. (˚C)	Buck/Boost Frequency (KHz)	Build-In		HW Protection
						16bit	UART	I2C				LDO	Buck/Boost Driver	
OB2112UP	TSSOP20	5	2.4A @ 5V	91%	50	3	1	1	2.6 ~ 6	-40 ~ +85	300/600	v	v	OCP/SCP/OVP/OTP/ULVP
OB2112VP	TSSOP28	12	2.4A @ 5V	91%	50	3	1	1	2.6 ~ 6	-40 ~ +85	300/600	v	v	OCP/SCP/OVP/OTP/ULVP
OB2112FP	QFN28	12	2.4A @ 5V	91%	50	3	1	1	2.6 ~ 6	-40 ~ +85	300/600	v	v	OCP/SCP/OVP/OTP/ULVP

Ultra Voltage Home Appliance 8-bit Flash Controller

Home Appliance for Your Life

Induction Cooker Controller

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		Build-In						HW Protection
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits	LDO	ZDI	HV-MOSFET	IGBT Driver	OPA	ACMP	
OB6652CKP	SOP24	5	16	256	22	3	-	1	1	5	10	13 ~ 24	-40 ~ +85	-	-	v	v	3	v	-	-	Surge/OCP/OVP/OTP/ULVP
OB6653CIP	SOP20	5	16	256	22	3	-	1	1	5	10	13 ~ 24	-40 ~ +85	-	-	v	v	-	v	-	-	Surge/OCP/OVP/OTP/ULVP
OB6654CGP	SOP16	12	8	256	8	4	-	1	1	8	12	10~ 22	-40 ~ +85	2	10	v	v	-	v	1	6	Surge/OCP/OVP/OTP/ULVP
OB6654CIP	SOP20	14	8	256	8	4	-	1	1	8	12	10 ~ 22	-40 ~ +85	2	10	v	v	-	v	1	6	Surge/OCP/OVP/OTP/ULVP
OB6657CIP	SOP20	14	8	256	8	4	v	1	1	8	12	10 ~ 22	-40 ~ +85	2	10	v	v	1	v	1	6	Surge/OCP/OVP/OTP/ULVP

Electric Heating Controller

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer		Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		Build-In				LED Driver	
						16bit	PCA	UART	I2C	CH	Bits			CH	Bits	LDO	ZDI	Touch Key	30V MOSFET	COM	SEG
OB5512KP	SOP20	13	8	512	22	2	1	-	1	5	10	8 ~ 24	-40 ~ +85	3	10	v	v	-	3	-	-
OB5513CP	SOP28	13	8	1280	22	2	1	1	1	8	10	8 ~ 24	-40 ~ +85	-	-	v	v	-	3	-	-
OB5531CLP	SOP28	19	15	768	16	2	1	1	1	7	12	10.8 ~ 30	-40 ~ +85	3	10	v	v	12	3	6	11
OB5532CP	SOP28	21	32	1024	22	3	1	2	1	8	12	10.8 ~ 30	-40 ~ +85	3	10	v	v	8	3	7	13
OB5533GP	LQFP33	25	32	1024	22	3	1	2	1	8	12	10.8 ~ 30	-40 ~ +85	4	10	v	v	8	3	7	16

Ultra Voltage Home Appliance 8-bit Flash Controller

Home Appliance for Your Life

Electric Scale 24bit Sigma-Delta ADC Controller

Part No.	Package	I/O	ROM (KB)	RAM (B)	HIRC (MHz)	Timer	Peripheral		ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM		Build-In	
						16bit	UART	I2C	CH	Bits			CH	Bits	LDO_Out	Temp. Sensor
OB1021CGP	SOP16	10	16	768	10	2	1	1	2	24	2.4~5.5	-40 ~ +85	2	10	v	v
OB1021VIP	TSSOP20	12	16	768	10	2	1	1	2	24	2.4~5.5	-40 ~ +85	2	10	v	v
OB1021CKP	SOP24	14	16	768	10	2	1	1	2	24	2.4~5.5	-40 ~ +85	2	10	v	v

Thermal Receipt Printer 32-bit USB Controller

OB Solution & Applications

Thermal Receipt Printer Controller

Part No.	Package	I/O	ROM (KB)	RAM (B)	Max. Speed (MHz)	Timer			Peripheral				ADC		Operating Voltage (V)	Operating Temp. (˚C)	PWM-M		Build-In		USB 2.0 (Full speed)	HW Protection
						32bit	16bit	RTC	UART	SPI	I2C	I2S	CH	Bits			CH	Bits	LDO	H-Bridge Driver		
OB6632FQP	QFN48	32	64	32	72	1	5	v	3	2	2	1	10	12	3.6 ~ 12	-40 ~ +105	6	16	V	2	v	OCP/OVP/TSD/ULVP

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Development Tools

- MSM9068 For 32-Bit ISP/ICP/ICE
- MSM9066 For 8-Bit 8051 Core ISP/ICP/ICE
- MSM9060 For 8-Bit PIC Core ISP/ICP/ICE
- SMAP Programming Tools Software
- ChipWatcher / PICStudio On-chip debug Tools Software

MSM9060 / MSM9066 / MSM9068 Development Tools

Development Tools

MSM9068
For ARM base ISP/ICP/ICE

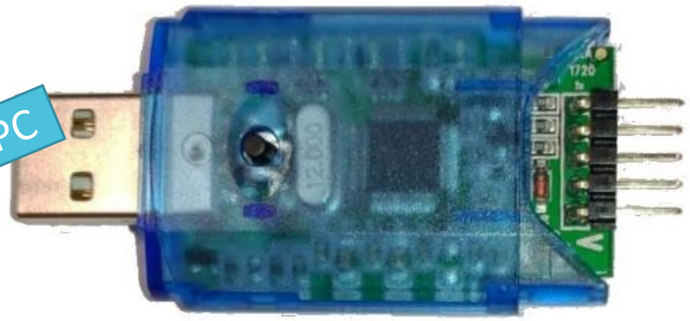
MSM9066
For 8051 base ISP/ICP/ICE

MSM9060
For PIC Base ISP/ICP/ICE

MSM9068 / MSM9066 / MSM9060:

- ✓On-line programming (ISP/ICP)
- ✓Off-line programming (ISP/ICP)
- ✓On-chip debug(ICE)

USB to NB & PC

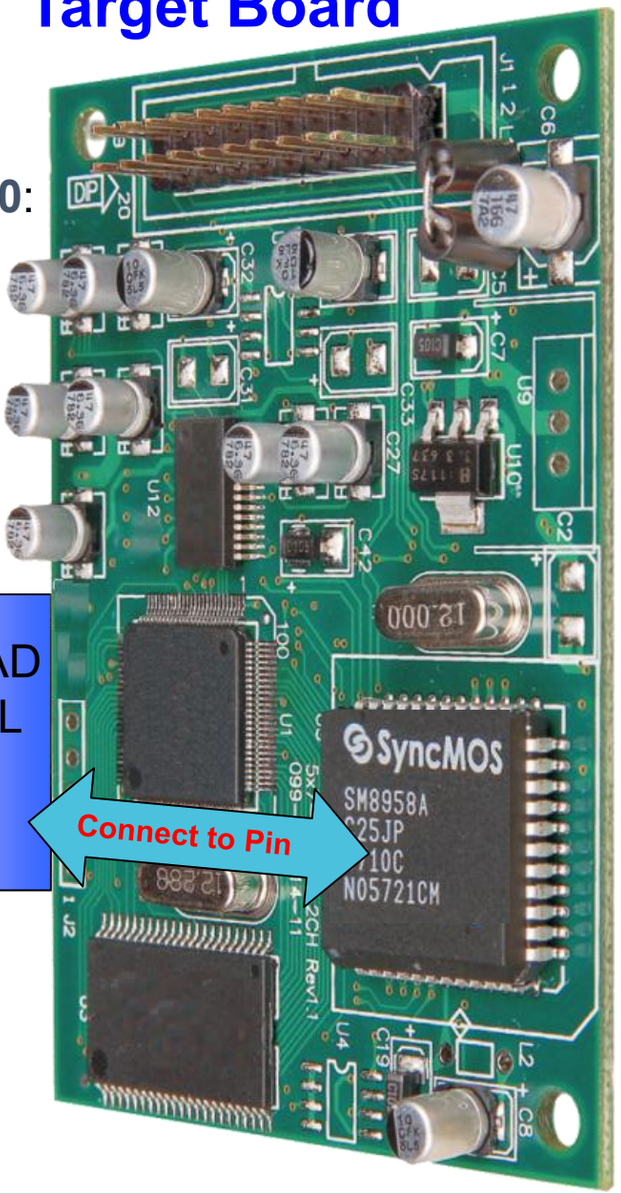


TXD
RXD
GND
VCC

OCI_SDAD
OCI_SCL
GND
VDD

Connect to Pin

Target Board



- Programming tools: SMAP collocate with MSM9068 / MSM9066 / MSM9060
- On-chip debug tools : Chipwatcher collocate with MSM9068 / MSM9066
  PICStudio collocate with MSM9060

SMAP and Debug tools download

Development Tools

Programming Tools(SMAP)

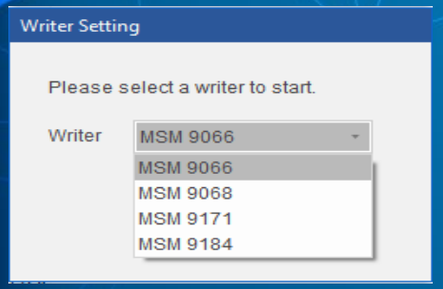
On-chip debug Tools(Chipwatcher)

On-chip debug Tools(PICStudio)

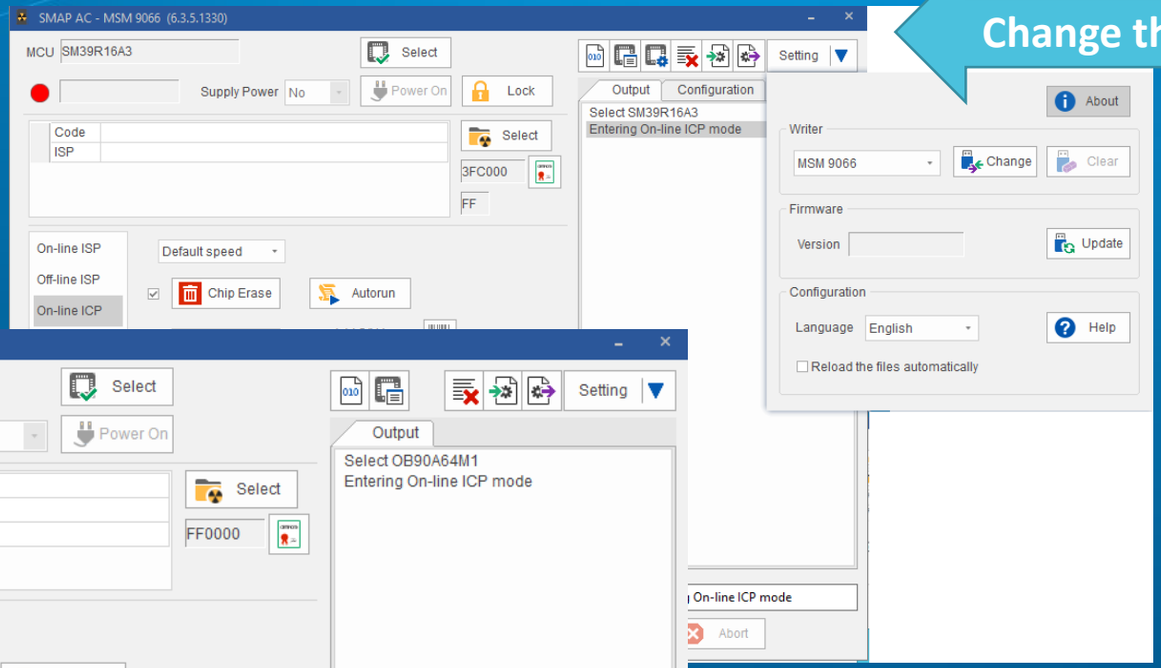
Programming Tools: SMAP collocate with MSM9068 / MSM9066 / MSM9060

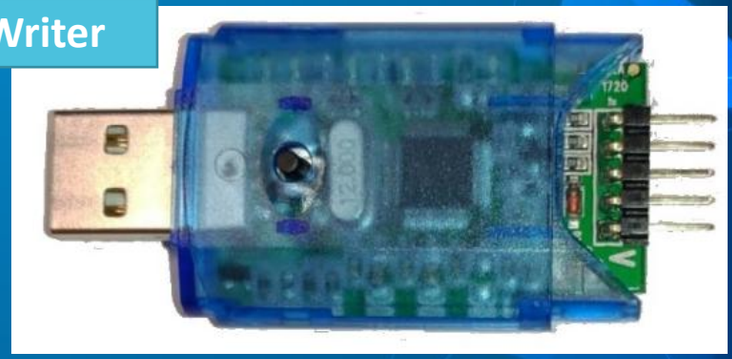
Development Tools

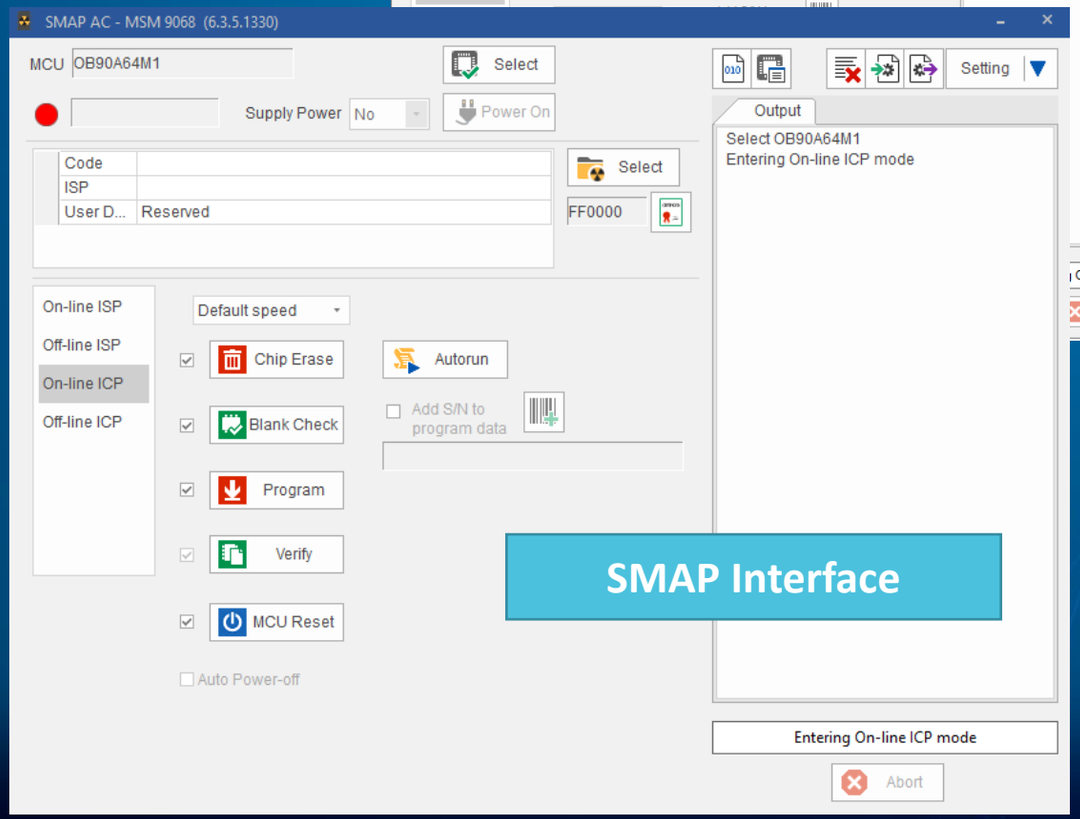
Select the Writer



Change the Writer





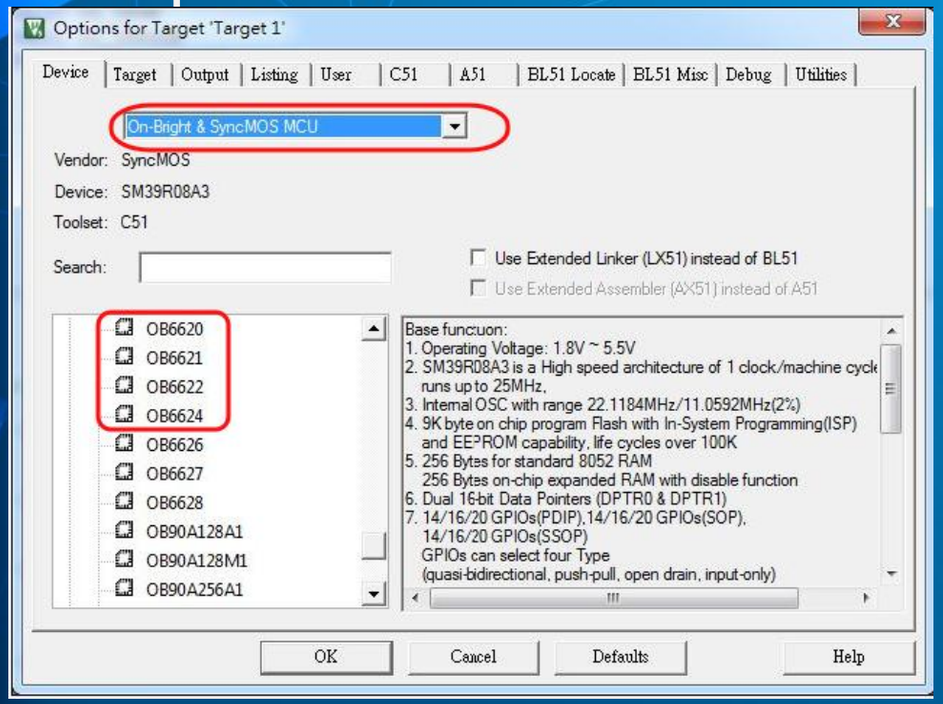


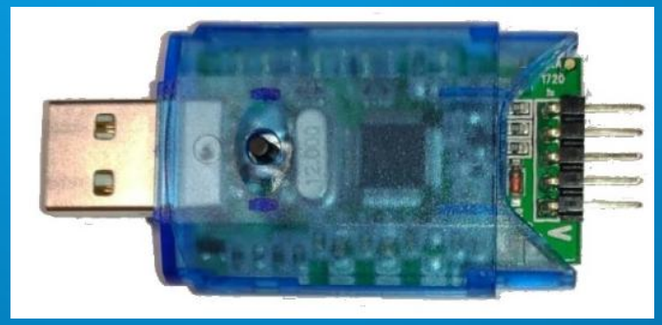
SMAP Interface

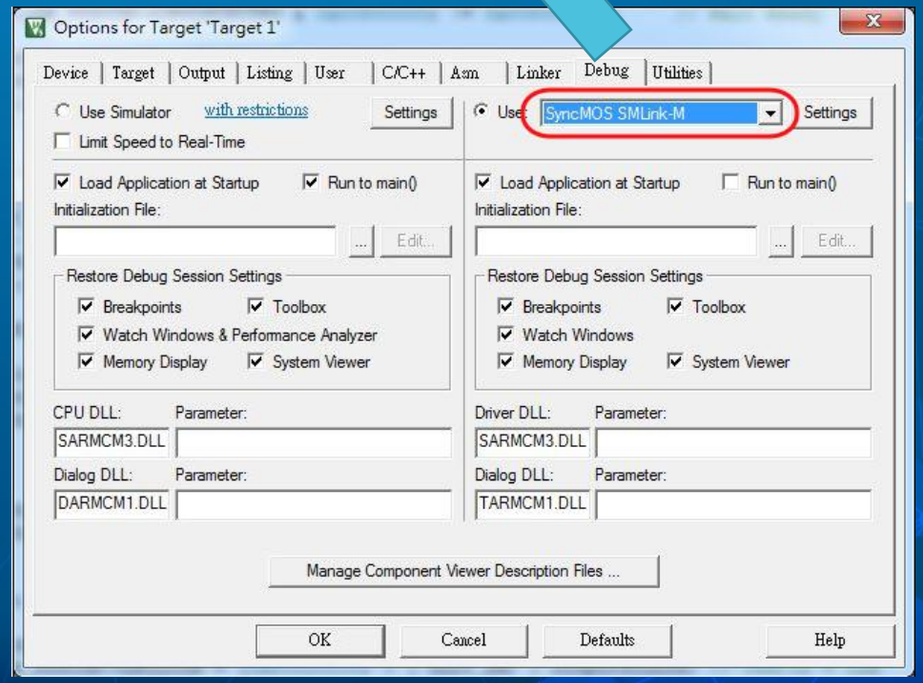
ICE Tools: Chipwatcher collocate with MSM9068 & MSM9066

Development Tools

Chipwatcher and SMLinkM :



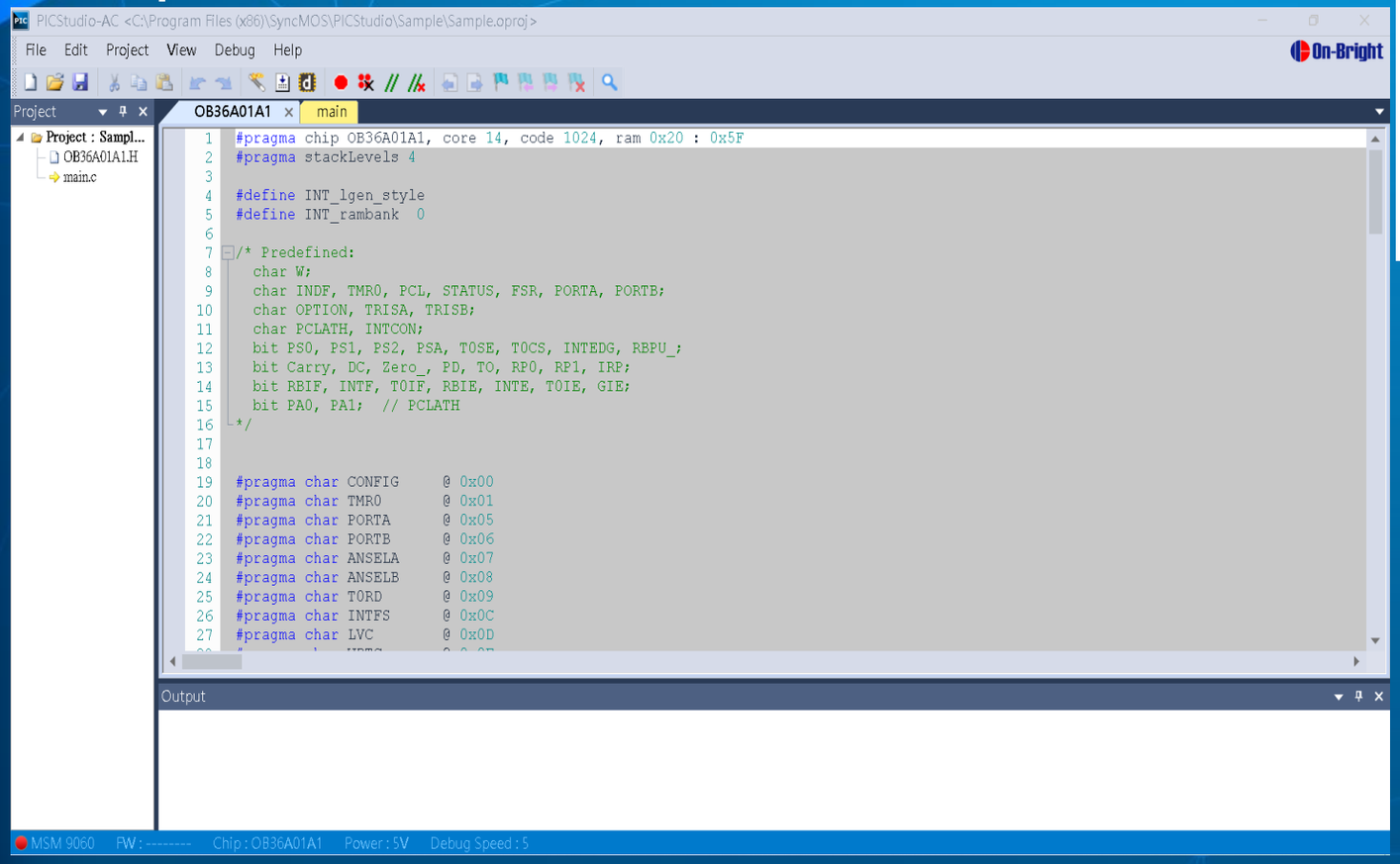


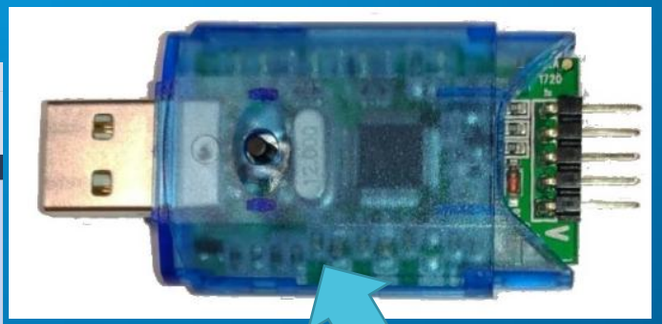


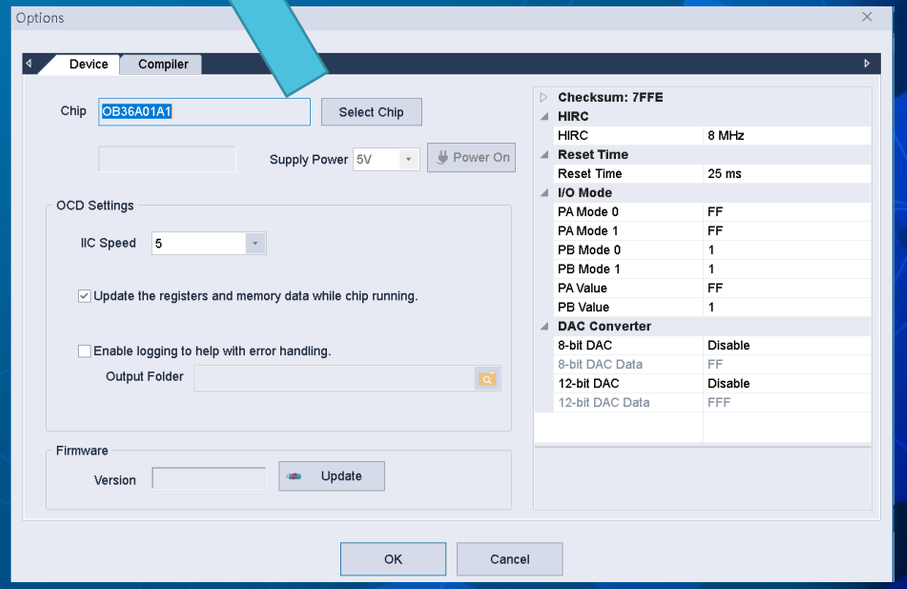
ICE Tools: PICStudio collocate with MSM9060

Development Tools

Chipwatcher and SMLinkM :







THANK YOU

Q & A