



Performance. Integration. Value.

MC56F8000 Series Digital Signal Controllers (DSC)

Product summary

Learn More: For current information about Freescale products and documentation, please visit www.freescale.com/dsc.

DSC Product Summary

Device	Speed (MHz)	Performance (MIPS)	Flash (KB)	RAM (KB)	I ² C	SCI/QSCI	SPI/QSPI	CAN	12-bit ADC	Analogue Comparator	12-bit DAC	Quad Decoder	PWM	PWM Fault Inputs	16-bit Timers	PIT	On-Chip Relaxation Oscillator	GPIO (max)	JTAG	Package	Temp Range		Operating Voltage	Other (Key Features, etc.)	10K# FSRP Starting Price	Evaluation Board
																					-40° to +105° C	-40° to +125° C				
MC56F8002	32	32	12	2	1	1 SCI	1 SPI	-	2	3	-	2	1 x 6-ch.	4	2	1	√	40	√	28 SOIC	√	-	1.8–3.6V	3 2X-16X Wideband PGAs, 9 different stop modes	1.5	MC56F8006DEMO
MC56F8006	32	32	16	2	1	1 SCI	1 SPI	-	2	3	-	2	1 x 6-ch.	4	2	1	√	40	√	48 LQFP 32 LQFP 28 SOIC	√	-	1.8–3.6V	2 2X-16X Wideband PGAs, 9 different stop modes	1.55	MC56F8006DEMO
MC56F8011	32	32	12	2	1	1 SCI	1 SPI	-	2 x 3-ch.	-	-	-	1 x 6-ch.	4	4	-	√	26	√	32 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	2.80	DEMO56F8014-EE
MC56F8013	32	32	16	4	1	1 SCI	1 SPI	-	2 x 3-ch.	-	-	-	1 x 6-ch.	4	4	-	√	26	√	32 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.06	DEMO56F8013-EE
MC56F8014	32	32	16	4	1	1 SCI	1 SPI	-	2 x 4-ch.	-	-	-	1 x 5-ch.	3	4	-	√	26	√	32 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.06	DEMO56F8014-EE
MC56F8023	32	32	32	4	1	1 QSCI	1 QSPI	-	2 x 3-ch.	2	2 (Internal)	-	1 x 6-ch.	4	4	1	√	26	√	32 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.20	56F8037EVM
MC56F8025	32	32	32	4	1	1 QSCI	1 QSPI	-	2 x 4-ch.	2	2 (Internal)	-	1 x 6-ch.	4	4	3	√	35	√	44 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.29	56F8037EVM
MC56F8027	32	32	32	4	1	2 QSCI	2 QSPI	1 MSCAN	2 x 8-ch.	2	2 (External)	-	1 x 6-ch.	4	8	3	√	53	√	64 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.72	56F8037EVM
MC56F8036	32	32	64	8	1	1 QSCI	1 QSPI	1 MSCAN	2 x 5-ch.	2	2 (Internal)	-	1 x 6-ch.	4	4	3	√	39	√	48 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.73	56F8037EVM
MC56F8037	32	32	64	8	1	2 QSCI	2 QSPI	1 MSCAN	2 x 8-ch.	2	2 (External)	-	1 x 6-ch.	4	8	3	√	53	√	64 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	3.98	56F8037EVM
MC56F8122	40	40	40	8	-	1 SCI	1 SPI	-	2 x 3-ch.	-	-	-	-	-	8	-	-	21	√	48 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	4.33	MC56F8323EVME
MC56F8123	40	40	40	8	-	1 SCI	1 SPI	-	2 x 4-ch.	-	-	-	-	-	8	-	-	27	√	64 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	4.48	MC56F8323EVME
MC56F8135	40	40	72	8	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	49	√	128 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	6.30	MC56F8367EVME
MC56F8145	40	40	136	8	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	49	√	128 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	7.02	MC56F8367EVME
MC56F8146	40	40	136	8	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	62	√	144 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	7.08	MC56F8367EVME
MC56F8147	40	40	136	8	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	76	√	160 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	7.52	MC56F8367EVME
MC56F8155	40	40	272	16	-	1 SCI	1 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	49	√	128 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	6.77	MC56F8367EVME
MC56F8156	40	40	272	16	-	1 SCI	1 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	62	√	144 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	9.01	MC56F8367EVME
MC56F8157	40	40	272	16	-	1 SCI	1 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	76	√	160 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	9.69	MC56F8367EVME
MC56F8165	40	40	544	32	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	49	√	128 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	13.16	MC56F8367EVME
MC56F8166	40	40	544	32	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	62	√	144 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	13.24	MC56F8367EVME
MC56F8167	40	40	544	32	-	2 SCI	2 SPI	-	4 x 4-ch.	-	-	1	1 x 6-ch.	4	8	-	-	76	√	160 LQFP	√	-	3.0–3.6V	Power-On_Reset and Low Voltage Detect	13.83	MC56F8367EVME
MC56F8322	60	60	48	12	-	2 SCI	2 SPI	1 FlexCAN	2 x 3-ch.	-	-	1	1 x 6-ch.	1	8	-	√	21	√	48 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	5.45	MC56F8323EVME
MC56F8323	60	60	48	12	-	2 SCI	2 SPI	1 FlexCAN	2 x 4-ch.	-	-	1	1 x 6-ch.	3	8	-	√	27	√	64 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	5.65	MC56F8323EVME
MC56F8335	60	60	80	12	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	49	√	LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	7.89	MC56F8367EVME
MC56F8345	60	60	144	12	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	49	√	128 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	8.83	MC56F8367EVME
MC56F8346	60	60	144	12	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	3 + 4	16	-	-	62	√	144 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	8.89	MC56F8367EVME
MC56F8347	60	60	144	12	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	76	√	160 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	9.45	MC56F8367EVME
MC56F8355	60	60	280	20	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	49	√	128 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	11.44	MC56F8367EVME
MC56F8356	60	60	280	20	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	3 + 4	16	-	-	62	√	144 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	11.51	MC56F8367EVME
MC56F8357	60	60	280	20	-	2 SCI	2 SPI	1 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	76	√	160 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	12.39	MC56F8367EVME
MC56F8365	60	60	576	36	-	2 SCI	2 SPI	2 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	49	√	128 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	16.48	MC56F8367EVME
MC56F8366	60	60	576	36	-	2 SCI	2 SPI	2 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	3 + 4	16	-	-	62	√	144 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	16.58	MC56F8367EVME
MC56F8367	60	60	576	36	-	2 SCI	2 SPI	2 FlexCAN	4 x 4-ch.	-	-	2	2 x 6-ch.	4 + 4	16	-	-	76	√	160 LQFP	√	√	3.0–3.6V	Power-On_Reset and Low Voltage Detect	17.31	MC56F8367EVME