



Digital Signal Processors



TMS320C2000™ Family (Cont.)

Flash (16-Bit Word)	RAM (16-Bit Word)	ROM (16-Bit Word)	Boot ROM (16-Bit Word)	McBSP	EMIF	Timers	PWM Chan.	SPI	SCI	CAN	Operating Voltage Core	Frequency (MHz)	Temperature (°C)	Package	Digi-Key Part No.	Price Each			Texas Instruments Part No.
																1	25	100	
64K	18K	2K	4K	—	—	15	16	Y	2	Y	1.8	100	-40 - 125	100-BGA	296-18333-ND	28.73	24.42	22.63	TMS320F2808GGMS
	18K	2K	4K	—	—	15	16	Y	2	Y	1.8	100	-40 - 85	100-LQFP	296-18334-ND	26.03	22.13	20.51	TMS320F2808PZA
	18K	2K	4K	—	—	15	16	Y	2	Y	1.8	100	-40 - 125	100-LQFP	296-18335-ND	28.73	24.42	22.63	TMS320F2808PZS
	18K	2K	4K	—	—	15	16	Y	2	Y	1.8	100	-40 - 85	100-BGA	296-18336-ND	26.03	22.13	20.51	TMS320F2808ZGMA
	18K	2K	4K	—	—	15	16	Y	2	Y	1.8	100	-40 - 125	100-BGA	296-18337-ND	28.73	24.42	22.63	TMS320F2808ZGMS
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	128-LQFP	296-15987-5-ND	31.08	26.43	24.48	TMS320F2810PBKA
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	128-LQFP	296-26859-ND	34.23	29.10	26.96	TMS320F2810PBKS
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 125	128-LQFP	296-17277-ND	39.50	33.58	31.11	TMS320F2810PBKQ
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	128-LQFP	296-15988-5-ND	33.10	28.14	26.07	TMS320F2811PBKA
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 125	128-LQFP	296-17278-ND	42.08	35.77	33.14	TMS320F2811PBKQ
128K	18K	1K	4K	Y	—	9	16	1	2	Y	1.8	150	-40 - 125	176-LQFP	296-26860-ND	38.94	33.10	30.67	TMS320F2812PGFS
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	100-BGA	296-21878-ND	29.06	24.71	22.89	TMS320F2809GGMA
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	100-LQFP	296-21879-ND	29.06	24.71	22.89	TMS320F2809PZA
	18K	1K	4K	—	—	15	16	4	2	2	1.8	100	-40 - 85	100-BGA	296-21880-ND	29.06	24.71	22.89	TMS320F2809ZGMA
	18K	1K	4K	Y	Y	4	16	Y	2	Y	1.8	150	-40 - 85	179-BGA	296-15969-5-ND	35.35	30.05	27.84	TMS320F2812GHHH
	18K	1K	4K	Y	Y	4	16	Y	2	Y	1.8	150	-40 - 125	179-BGA	296-17279-ND	41.52	35.91	33.67	TMS320F2812GHHQ
	18K	1K	4K	Y	Y	4	16	Y	2	Y	1.8	150	-40 - 125	176-LQFP	296-17280-ND	41.52	35.91	33.67	TMS320F2812PGFO
	18K	2K	4K	Y	Y	7	16	Y	2	Y	1.9	150	-40 - 85	179-BGA	296-18338-ND	35.35	30.05	27.84	TMS320F2812ZHHA
	18K	2K	4K	Y	Y	7	16	Y	2	Y	1.9	150	-40 - 125	179-BGA	296-18339-ND	38.94	33.10	30.67	TMS320F2812ZHHS
	256K	32K	1K	8K	Y	—	7	1	Y	2	Y	1.8	150	-40 - 85	128-LQFP	296-18916-ND	22.59	19.00	17.46
32K		1K	8K	Y	—	7	1	Y	2	Y	1.8	150	-40 - 125	128-LQFP	296-18917-ND	26.15	22.23	20.60	TMS320R2811PBKQ
32K		1K	8K	Y	—	7	1	Y	2	Y	1.8	150	-40 - 85	176-LQFP	296-18918-ND	23.90	20.32	18.83	TMS320R2812PGFA
32K		1K	8K	Y	—	7	1	Y	2	Y	1.8	150	-40 - 125	176-LQFP	296-18919-ND	30.41	25.85	23.95	TMS320R2812PGFO
36K		2K	8K	Y	Y	4	16	Y	2	Y	1.9	150	-40 - 85	176-LQFP	296-15990-5-ND	35.35	30.05	27.84	TMS320F2812PGFA
512K	68K	2K	8K	2	1	4	18	1	3	2	1.9	150	-40 - 85	176-LQFP	296-23871-ND	32.65	27.76	25.72	TMS320F2823PGFA
	68K	2K	8K	2	1	4	18	1	3	2	1.9	150	-40 - 85	176-LQFP	296-23660-ND	35.12	29.86	27.66	TMS320F2833PGFA
	68K	2K	8K	2	1	4	18	1	3	2	1.9	150	-40 - 85	179-BGA	296-22069-ND	35.12	29.86	27.66	TMS320F28335ZHHA
	68K	2K	8K x 16	2	Y	4	18	1	—	2	1.9	150	-40 - 105	20-VQFN	296-25723-ND	83.32	74.49	70.70	SM320F28335JZMPE
1024K	18K	16K	64K	—	—	3	16	4	2	2	1.8	100	-55 - 125	100-LQFP	296-22218-ND	45.75	39.58	37.10	SM320F2808PZMPE
Delfino™ Microcontroller - RoHS Compliant																			
—	130K	—	8K	2	Y	3	6	2	3	2	1.1	200	-40 - 105	179-BGA	296-24215-ND	30.30	25.76	23.86	TMX320C28343ZHH
—	258K	—	8K	2	Y	3	6	2	3	2	1.2	300	-40 - 105	256-BGA	296-24216-ND	44.21	37.59	34.82	TMX320C28346ZEP
512K	34K	2K	8K x 16	2	Y	4	18	1	—	2	1.9	150	-40 - 85	179-BGA	296-25243-ND	41.52	35.91	33.67	SM320F28335GHHAEP
	64K	2K	8K x 16	2	Y	4	18	1	—	2	1.9	150	-40 - 125	176-LQFP	296-24955-ND	83.32	74.49	70.70	SM320F28335PTMPPE

◆ RoHS Compliant △ Cut Tape ◇ Tape and Reel

TMS470 Family

The TMS470 is derived from the 32-bit ARM7TDMI® core. This industry standard architecture includes two instruction sets, a 32-bit instructions for fast execution and 16-bit instructions for high code density. It allows unlimited switching between instruction sets and also provides run time decompression. Typical applications include industrial systems, medical instrumentation, consumer electronics, data processing and many other general purpose embedded applications.

Flash (KB)	RAM (KB)	Timer Channels	ADC	SPI	SCI	CAN2	I/O 3.3V	Frequency (MHz)	Package	Digi-Key Part No.	Price Each			Texas Instruments Part No.
TMS470R1x														
64	8	13	8 Ch, 10-Bit	2	2	SCC	40	48	80-LQFP	296-19270-ND	12.49	10.24	9.24	TMS470R1A64PNT
128	8	16	16 Ch, 10-Bit	2	2	SCC	50	48	100-LQFP	296-19267-ND	13.47	11.05	9.97	TMS470R1A128PZ-T
256	12	16	16 Ch, 10-Bit	2	2	SCC	50	48	100-LQFP	296-17754-ND	14.46	12.17	11.18	TMS470R1A256PZ
256	12	16	16 Ch, 10-Bit	2	2	SCC	50	48	100-LQFP	296-19268-ND	14.32	12.05	11.07	TMS470R1A256PZ-T
288	16	12	12 Ch, 10-Bit	2	2	SCC	57	48	144-LQFP	296-18723-ND	16.79	14.12	12.98	TMS470R1A288PGEA
288	16	12	12 Ch, 10-Bit	2	2	SCC	57	48	144-LQFP	296-21881-ND	16.79	14.12	12.98	TMS470R1A288PGET
288	16	12	12 Ch, 10-Bit	2	2	SCC	57	48	100-LQFP	296-21882-ND	16.05	13.50	12.40	TMS470R1A288PZ-T
384	32	16	12 Ch, 10-Bit	2	2	SCC	94	48	144-LQFP	296-18724-ND	19.13	16.09	14.79	TMS470R1A384PGET
384	32	16	12 Ch, 10-Bit	2	2	SCC	94	48	100-LQFP	296-19292-ND	18.39	15.47	14.22	TMS470R1A384PZ-T
512	32	32	16 Ch, 10-Bit	3	2	HECC	86	60	144-LQFP	296-19855-ND	22.22	18.69	17.17	TMS470R1B512PGET
768	48	32	16 Ch, 10-Bit	5	2	HECC	87	60	144-LQFP	296-19271-ND	29.06	24.71	22.89	TMS470R1B768PGE
768	48	32	16 Ch, 10-Bit	5	2	HECC	87	60	144-LQFP	296-19335-ND	26.82	22.80	21.13	TMS470R1B768PGET
1000	64	16	12 Ch, 10-Bit	2	3	HECC	93	60	144-LQFP	296-18591-ND	31.08	26.43	24.48	TMS470R1B1MPGEA

◆ RoHS Compliant

NEW! TMS570LS Family



The TMS570LS Family integrates the ARM® Cortex™-R4F Floating Point CPU which offers an efficient 1.6DMIPS/MHz, and has configurations which can run up to 16MHz providing more than 250DMIPs. The TMS570LS series also provides different Flash (1MB or 2MB) and data SRAM (128KB or 160KB) options with single bit error correction and double bit error detection.

Flash	RAM (KB)	FlexRay	ADC	SPI	SCI	CAN	I/O	Frequency (MHz)	Package	Digi-Key Part No.	Price Each			Texas Instruments Part No.
2MB	160	2-Ch.	2 x 12-Bit	3	2	2	3.3V	140	144-LQFP	296-27256-ND	79.81	71.34	67.72	X5LS20216ASPGEQ01
2MB	160	2-Ch.	2 x 12-Bit	3	2	2	3.3V	160	337-NFBGA	296-27257-ND	81.10	72.50	68.82	X5LS20216ASZWT001

DSP Starter Kits

A wide variety of DSP boards and development kits are available from TI and TI's third party network. Products include development boards, evaluation modules, hardware/software bundles and DSP Starter Kits (DSKS) designed to accelerate the application design process from concept through production. DSP Starter

Kits are bundled with a DSK-version of TI's Code Composer Studio Development Tools. These provide an excellent platform to evaluate TI DSP and development tools, quickly develop prototypes, demos and proof-of-concept applications at a very affordable getting started price.

Kit Contents:

• Development Board • Parallel PC Cable • US Power Supply • CD-ROM containing documentation and DSK version of Code Composer Studio (TMDSEZD2407; EzDSP version of Code Composer Studio)

Digi-Key Part No.	Price Each	Texas Instruments Part No.
296-23057-ND	173.62	TMSADP1420
296-23051-ND	113.61	TMSADP1460
296-23054-ND	174.79	TMSDSK33
296-23050-ND	576.80	TMSDSK5509
296-15827-ND	460.28	TMSDSK5510
296-15829-ND	460.28	TMSDSK5416
296-23038-ND	576.80	TMSDSK6416-T
296-23036-ND	693.33	TMSDSK6455
296-15831-ND	460.28	TMSDSK6713
296-23541-ND	68.75	TMSDSKCD2808
296-23543-ND	103.71	TMSDSKCD2808
296-23048-ND	1677.74	TMSDSMU58
296-23043-ND	3365.57	TMSDSMU560U
296-15828-ND	402.01	TMDSEZD2407
296-23002-ND	555.49	TMDSEZS2812

Digi-Key Part No.	Price Each	Texas Instruments Part No.
296-23055-ND	460.28	TMDSEZD2812
296-23058-ND	2238.86	TMDSEVM642
296-23035-ND	2799.97	TMDSEVM6446
296-23039-ND	2799.97	TMDSEVM6446-0E
296-23049-ND	699.15	TMDSSUBALL
296-23122-ND	1453.26	TMDXDPV648
296-25251-ND	1123.28	TMDXEVMS317
296-23045-ND	576.80	TMDXEZ28044
296-23046-ND	4042.23	TMDSCCSALL-1
296-23056-ND	576.80	TMDSSUB2000
296-23542-ND	80.40	TMDSCNCD28335
296-23544-ND	115.36	TMDSDOCK28335
296-23855-ND	576.80	TMDSEZ28335
296-24848-ND	954.62	TMDXOSK138BET
296-24231-ND	406.67	TMDSENRYKIT
296-24600-ND	1118.79	TMDSEVM3530-L

Digi-Key Part No.	Price Each	Texas Instruments Part No.
296-24649-ND		