

32- and 64-bit RISC MIPS Microprocessors

0

Part Type	Speed (MHz)	Pkg Code	No. Pins	Grades ¹			Avail.	Function	Comments	Pkg Type	Heat Slug	Cavity
				C	M	B						
PR2000A ¹	16	PGC	145	X			Now	32-bit CPU	Use PR3000A for new designs	CPGA	No	U
PR2010A ¹	16	QJC	84	X			Now	32-bit FPA	Use PR3010A for new designs	CQFPJ	No	U
PR3000 ¹	20,25,33	PGC	145	X			Now	32-bit CPU	Use PR3000A for new designs	CPGA	No	U
PR3000 ¹	20,25,33	QLC	172	X			Now	32-bit CPU	Use PR3000A for new designs	CQFP	No	U
PR3010 ¹	20,25,33	QJC	84	X			Now	32-bit FPA	Use PR3010A for new designs	CQFPJ	No	U
PR3010 ¹	20,25,33	PGC	84	X			Now	32-bit FPA	Use PR3010A for new designs	CPGA	Yes	D
PR3010 ¹	20,25,33	QLC	84	X			Now	32-bit FPA	Use PR3010A for new designs	CQFP	Yes	D
PR3000A ¹	20,25,33	SG	145	X			Now	32-bit CPU	For old existing designs only	CPGA	Yes	D
PR3000A	20,25,33,40	SG	175	X			Now	32-bit CPU		CPGA	Yes	D
PR3000A	20,25,28,33	SG	175		X	X	Now	32-bit CPU		CPGA	Yes	D
PR3000A	20,25,33	SF	172	X			Now	32-bit CPU		CQFP	Yes	D
PR3000A	20,25,28,33	SF	172		X	X	Now	32-bit CPU		CQFP	Yes	D
PR3000A	20,25,33,40	MQ	160	X			Now	32-bit CPU		MQFP	No	D
PR3010A	20,25,33	SR	84	X			Now	32-bit FPA	40 MHz Contact Marketing	CQFPJ	No	U
PR3010A	20,25,33,40	SG	84	X			Now	32-bit FPA		CPGA	No	D
PR3010A	20,25,28,33	SG	84		X	X	Now	32-bit FPA		CPGA	No	D
PR3010A	20,25,33	SF	84	X			Now	32-bit FPA		CQFP	No	D
PR3010A	20,25,28,33	SF	84		X	X	Now	32-bit FPA		CQFP	No	D
PR3010A	20,25,33,40	MQ	160	X			Now	32-bit FPA		MQFP	No	D
PR3020	25,33	PP	68	X			Now	Write Buffer	Use PR3100A or P for new designs	PLCC	No	U
PR3100P	25,33,40	PQ	160	X			Q3'92	32-bit	Postscript Compatible, Contact Marketing	PQFP	No	U
PR3100A	25,33,40	PQ	160	X			Now	Write/Read		PQFP	No	U
PR3100A	25,33,40	SG	175	X				and Parity		CPGA		
PR3100A	20,25,33	SF	172	X	X	X		Buffer		CQFP		
PR3400L	25,33,40	SG	145	X			Now	CPU/FPA	2x (Four Clock Inputs) Monolithic	CPGA	Yes	D
PR3400L	25,33	SG	145		X	X	Now	CPU/FPA		CPGA	Yes	D
PR3400	25,33,40	SG	175	X			Now	CPU/FPA	Contact Marketing	CPGA	Yes	D
PR3400	25,33	SG	175		X	X	Now	CPU/FPA		CPGA	Yes	D
PR3400	25,33	SF	172	X	X	X		CPU/FPA		CQFP	Yes	D
PR3400	25,33	MQ	160	X			Now	CPU/FPA		MQFP	No	D
PR3400N	25,33,40	MQ	160	X			Now	CPU/FPA		MQFP	No	D
PR4000P ²	50	SG	179	X	X	X	Q3'92	64-bit CPU	Monolithic 64-bit CPU/FPA/Primary caches	CPGA	Yes	D
PR4000S ²	50	SG	447	X	X	X	Q3'92	64-bit CPU	Monolithic with secondary cache interface	CPGA	Yes	D
PR4000M ²	50	SG	447	X	X	X	Q3'92	64-bit CPU	Monolithic with multiprocessing capability	CPGA	Yes	D
PIPER ³	35,40,45	MQ	160	X			Q3'92	Controller	CPU/FPA/Buffers/8:2K/4:4K I/D Caches	MQFP	No	D
PIPER ³	35,40,45	SG	175	X			Q3'92	Controller	CPU/FPA/Buffers/8:2K/4:4K I/D Caches	CPGA	Yes	D
PIPER ³	25,35	SG	175		X	X	Q3'93	Controller	Contact Marketing	CIGA	Yes	D
PIMM	33,40	SG	144	X			Now	Subsystem	CPU/FPA/PR3100A, 32K each I/D Caches	CPGA	Yes	D
PIMM	25,33	SG	144		X	X		Subsystem	Contact Marketing	CPGA	Yes	D
PCBM	25,33,40	—	—	X			Now	Board Module	Order code: PCBM/3400-xx	Board	N/A	N/A
VME board	25,33,40	—	—	X			Now	4 Meg DRAM	Order code: PR3400-xxVB004C	Board	N/A	N/A
VME board	25,33,40	—	—	X			Now	16 Meg DRAM	Order code: PR3400-xxVB016C	Board	N/A	N/A

Notes: 1. Ordering information remains the same as before (without showing # of pins — e.g. PR2000A-16PGC, for the 16MHz 145-pin PR2000A).

2. Military Class-B versions of the PR4000P, S & M as well as 3.3V versions operating at higher frequency will be offered in the future.

3. The PIPER will also be offered in a CPU only version at 5V, followed by 3.3V versions of both the CPU and CPU/FPA PIPERS.

4. C = Com'l Temp. 0°C to 70°C

M = Mil. Temp. -55°C to +125°C

B = Mil. Qual to MIL-STD-883D, Class-B, -55°C to +125°C.

Package Codes:

P=Plastic

M=Metal

S=Hermetic Solder Seal

G=Pin Grid Array (e.g. SG)

F=Quad Flat Pack/Straight Lead (e.g. SF)

P=Plastic Leaded Chip Carrier (e.g. PP)

Q=Quad Flat Pack/Gull Wing (e.g. PQ, MQ)

R=Quad Flat Pack/J-Bend (e.g. SR)