

PALs, GALs & PEELs

*Web Code: YAD

Part No.	Mfr.	Product No.	Pkg.	Description	1	10
28020	+	PAL16L8	DIP-20	Octal 16-input AND-OR-INVERT gate array	\$1.95	\$1.75
111667	+	PAL16R6ANC	DIP-20	TTL, 32 x 64 AND array	.59	.35
652615	+	GAL16V8-7	DIP-20	7ns 64 x 32 AND array	2.95	2.75
88399	+	GAL16V8-10*	DIP-20	10ns 64 x 32 AND array	2.75	2.49
37452	+	GAL16V8-15*	DIP-20	15ns 64 x 32 AND array	2.49	2.25
37461	+	GAL16V8-25*	DIP-20	25ns 64 x 32 AND array	2.39	2.15
876539	LAT	GAL16V8D-25LP	DIP-20	25ns 64 x 32 AND array	2.49	2.25
312995	+	16CV8P-25	DIP-20	25ns 64 x 32 AND array, PEEL	.69	.49
38658	+	GAL20V8-15**	DIP-24	15ns 64 x 40 AND array	1.59	1.45
38666	+	GAL20V8-25	DIP-24	25ns 64 x 40 AND array	1.49	1.15
105996	ANA	22CV10AP-25	DIP-24	25ns 132 x 44 AND array, PEEL	3.95	3.75
39159	+	GAL22V10-15	DIP-24	15ns 132 x 44 AND array	3.75	3.49
39167	+	GAL22V10-25	DIP-24	25ns 132 x 44 AND array	2.95	2.75
2065633	LAT	LC4128V-75TN100C	TOFP-100	333MHz 128mc 3.3V	8.95	6.95

GALs are electrically erasable, CMOS PLDs that can be reprogrammed and can be used in place of numerous PALs

- * Replaces PALs: 10H8, 10L8, 10P8, 12H6, 12L6, 12P6, 14H4, 14L4, 14P4, 16H2, 16H8, 16L2, 16L8, 16P2, 16P8, 16R4, 16R6, 16R8, 16RP4, 16RP6, 16RP8, 14H8, 14L8, 14P8, 16H6, 16L6, 16P6
- ** Replaces PALs: 18H4, 18L4, 18P4, 20H2, 20H8, 20L2, 20L8, 20P2, 20P8, 20R4, 20R6, 20R8, 20RP4, 20RP6, 20RP8

Voice Chip

*Web Code: XAU

Single-Chip Voice Record/Playback Device

- Manual switch or microprocessor controllable
- Directly cascadable for longer durations
- Single voltage operation: +5V (4.5V to 5.5V operating range)
- Playback can be edge or level-activated • 28-pin DIP
- Typical 100k record cycles, 1µA standby current and 100 year message retention



Part No.	Mfr. Part No.	Description	1	10	50
141671	ISD1110P	Voice record/playback (10 sec.)	\$6.95	\$6.25	\$5.49

Microcontrollers

*Web Code: PAV

Part No.	Mfr.	Mfr. Part No.	Pkg.	Description	1	10
145040	MCH	PIC12C508A-04/P	DIP-8	512 OTP, 4MHz, 5 I/O, C-temp	.95	\$.85
144258	MCH	PIC12C509A-04/P	DIP-8	1k OTP, 4MHz, 5 I/O, C-temp	.95	.85
145058	MCH	PIC12C509A/JW	DIP-8	1k EPROM, 41-bit, 4MHz, 5 I/O	5.95	4.95
193455	MCH	PIC12C671-04/P	DIP-8	1k OTP, 128-bit, 4MHz, 6 I/O	1.49	1.25
193463	MCH	PIC12C672-04/P	DIP-8	2k OTP, 128-bit, 4MHz, 6 I/O	1.49	1.25
248145	MCH	PIC12CE674-10/P	DIP-8	2k OTP, 128-bit, 10MHz, 5 I/O	1.95	1.75
223790	MCH	PIC12F629-1/P	DIP-8	1k flash, 20MHz, 6 I/O, I-temp	.95	.89
223781	MCH	PIC12F675-1/P	DIP-8	1k flash, 20MHz, 6 I/O, I-temp	.99	.95
312514	MCH	PIC12F683-3/P	DIP-8	2k flash, 20MHz, 6 I/O, I-temp	1.39	1.29
128338	MCH	PIC16C54A-04/P	DIP-18	512 OTP, 4MHz, 12 I/O, C-temp	1.39	1.29
247214	MCH	PIC16C54C-20/P	DIP-18	512 OTP, 25-bit, 20MHz, 12 I/O	1.25	.95
193341	MCH	PIC16C57C-04/P	DIP-28	2k OTP, 4MHz, 20 I/O, C-temp	2.09	1.95
200424	MCH	PIC16C66-04/SP	DIP-18	8k OTP, 368-bit, 4MHz, 22 I/O	3.95	2.95
247484	MCH	PIC16C67-20/P	DIP-40	8k OTP, 368-bit, 20MHz, 33 I/O	3.95	2.95
247695	MCH	PIC16C72A-20/P	DIP-28	2k OTP, 128-bit, 20MHz, 22 I/O	2.95	2.25
193359	MCH	PIC16C711-04/P	DIP-18	1k OTP, 4MHz, 13 I/O, C-temp	2.25	2.15
247599	MCH	PIC16C711-20/P	DIP-18	1k OTP, 68-bit, 20MHz, 13 I/O	2.25	1.95
247601	MCH	PIC16C711-20/SO	SOIC-8	1k OTP, 68-bit, 20MHz, 13 I/O	1.95	1.49
145111	MCH	PIC16F84A-04/P	DIP-18	1k flash, 4MHz, 13 I/O, C-temp	3.55	3.45
145120	MCH	PIC16F84-10/P	DIP-18	1k flash, 10MHz, 13 I/O, C-temp	5.95	5.25
193332	MCH	PIC16F84A-20/P	DIP-18	1k flash, 20MHz, 13 I/O, C-temp	3.95	3.75
246861	MCH	PIC16F84A-20/P	DIP-18	1k flash, 20MHz, 13 I/O, I-temp	4.15	4.05
246887	MCH	PIC16F84A-20/SS	SSOP-20	68-bit, 1k flash, 20MHz, 13 I/O	3.95	2.95
247097	MCH	PIC16F87-I/P	DIP-18	4k flash, 20MHz, 16 I/O, I-temp	2.95	2.49
312733	MCH	PIC16F88-I/P	DIP-18	4k flash, 20MHz, 16 I/O, I-temp	3.25	2.95
193439	MCH	PIC16F827-20/P	DIP-18	1k flash, 20MHz, 16 I/O, C-temp	2.95	2.49
193447	MCH	PIC16F828-20/P	DIP-18	2k flash, 20MHz, 16 I/O, C-temp	3.25	2.95
246756	MCH	PIC16F828-20/P	DIP-18	2k flash, 20MHz, 16 I/O, I-temp	3.59	3.45
223749	MCH	PIC16F630-I/P	DIP-14	1k flash, 20MHz, 12 I/O, I-temp	1.29	1.19
247142	MCH	PIC16F648A-I/P	DIP-18	4k flash, 20MHz, 16 I/O, I-temp	2.15	1.95
223757	MCH	PIC16F676-I/P	DIP-14	1k flash, 20MHz, 12 I/O, I-temp	1.39	1.29

Microcontrollers (Continued)

*Web Code: PAV

Part No.	Mfr.	Mfr. Part No.	Pkg.	Description	1	10
312590	MCH	PIC16F684-I/P	DIP-14	2k flash, 20MHz, 12 I/O, I-temp	\$1.59	\$1.49
312611	MCH	PIC16F688-I/P	DIP-14	4k flash, 20MHz, 12 I/O, I-temp	1.95	1.75
2127523	MCH	PIC16F690-I/P	DIP-20	7k flash, 20MHz, 18 I/O	1.89	1.75
223765	MCH	PIC16F818-I/P	DIP-18	1k flash, 20MHz, 16 I/O, I-temp	2.09	1.95
247071	MCH	PIC16F819-I/SS	SSOP-20	256-bit, 2k flash, 20MHz, 16 I/O	1.95	1.49
223773	MCH	PIC16F819-I/P	DIP-18	2k flash, 20MHz, 16 I/O, I-temp	2.49	2.25
246895	MCH	PIC16F870-I/SP	DIP-28	2k flash, 20MHz, 22 I/O, I-temp	2.95	2.75
246941	MCH	PIC16F872-I/SP	DIP-28	2k flash, 20MHz, 22 I/O, I-temp	2.95	2.75
246975	MCH	PIC16F873A-I/SP	DIP-28	4k flash, 20MHz, 22 I/O, I-temp	3.95	3.75
193367	MCH	PIC16F876-20/SP	DIP-28	8k flash, 20MHz, 22 I/O, C-temp	5.95	5.75
247011	MCH	PIC16F876A-I/SP	DIP-28	8k flash, 20MHz, 22 I/O, I-temp	4.49	4.35
247046	MCH	PIC16F877A-I/L	PLCC-44	8k flash, 20MHz, 33 I/O, I-temp	5.65	5.45
176882	MCH	PIC16F877-20/P	DIP-40	8k flash, 20MHz, 22 I/O, C-temp	5.65	5.45
247038	MCH	PIC16F877A-I/P	DIP-40	8k flash, 20MHz, 33 I/O, I-temp	4.85	4.69
2127531	MCH	PIC16F886-I/P	DIP-28	14k flash, 20MHz, 25 I/O	1.95	1.85
2127540	MCH	PIC16F887-I/P	DIP-40	14k flash, 20MHz, 35 I/O	2.15	2.05
247880	MCH	PIC17C42A-16/L	PLCC-44	2k OTP, 232-bit, 16MHz, 33 I/O	5.95	4.95
247919	MCH	PIC17C44-33/P	DIP-40	8k OTP, 454-bit, 33MHz, 33 I/O	7.95	5.95
247943	MCH	PIC17C756A-33/L	PLCC-68	16k OTP, 902-bit, 33MHz, 50 I/O	9.95	7.95
247951	MCH	PIC17C762-16/L	PLCC-44	8k OTP, 678-bit, 33MHz, 66 I/O	10.95	8.95
247960	MCH	PIC17C766-33/L	PLCC-84	16k OTP, 902-bit, 33MHz, 66 I/O	10.95	8.95
200491	MCH	PIC18C242-I/SP	DIP-28	16k OTP, 512-bit, 40MHz, 23 I/O	3.95	2.95
247994	MCH	PIC18F252-I/SP	DIP-28	32k flash, 40MHz, 23 I/O, I-temp	5.39	5.25
248081	MCH	PIC18F442-I/L	PLCC-44	768-bit, 8k flash, 40MHz, 34 I/O	4.95	3.95
312477	MCH	PIC18F448-I/L	PLCC-44	768-bit, 16k flash, 40MHz, 33 I/O	5.95	4.95
248031	MCH	PIC18F452-I/P	DIP-40	32k flash, 40MHz, 34 I/O, I-temp	5.95	5.75
248057	MCH	PIC18F458-I/P	DIP-40	32k flash, 40MHz, 33 I/O, I-temp	6.95	6.49
248129	MCH	PIC18F1320-I/SO	SOIC-18	256-bit, 4k flash, 40MHz, 16 I/O	1.95	1.49
248111	MCH	PIC18F1320-I/P	DIP-18	8k flash, 40MHz, 16 I/O, I-temp	4.09	3.95
312303	MCH	PIC18F2525-I/SP	DIP-28	48k flash, 40MHz, 25 I/O, I-temp	6.49	6.25
248330	ATM	ATMEGA8-16PI	DIP-28	8k flash, 16MHz, 23 I/O, I-temp	4.75	4.25
765302	ATM	ATTINY13-20PU	DIP-8	1k flash, 20MHz, 6 I/O, I-temp	2.25	2.05
168874	ATM	AT89C2051-24PU	DIP-20	2k flash, 24MHz, 15 I/O, C-temp	1.49	1.35
200489	ATM	AT89C4051-24PC	DIP-20	4k flash, 24MHz, 15 I/O, C-temp	2.45	2.15
689039	ATM	ATTINY2313V-10PU	DIP-20	2k flash, 10MHz, 18 I/O, I-temp	2.49	2.25
1537061	ATM	ATTINY2313-20PU	DIP-20	2k flash, 20MHz, 18 I/O, I-temp	2.95	2.49
323141	ATM	ATMEGA8515-16PC	DIP-40	8k flash, 16MHz, 35 I/O, C-temp	4.95	4.75
395621	ATM	ATMEGA8515L-8PC	DIP-40	8k flash, 8MHz, 35 I/O, C-temp	3.75	3.49
168911	ATM	AT89C51-24JC	PLCC-44	4k flash, 24MHz, 32 I/O, C-temp	2.95	2.75
168903	ATM	AT89C51-24PC	DIP-40	4k flash, 24MHz, 32 I/O, C-temp	2.95	2.75
168920	ATM	AT89C52-24PC	DIP-40	8k flash, 24MHz, 32 I/O, C-temp	2.95	2.49
220871	ATM	AT89S52-24JI	PLCC-44	8k flash, 24MHz, 32 I/O, I-temp	1.95	1.75
662637	ATM	AT89S52-24PC	DIP-40	8k flash, 24MHz, 32 I/O, C-temp	1.95	1.75
168946	ATM	AT89C55WD-24PC	DIP-40	20k flash, 24MHz, 32 I/O, C-temp	3.49	3.25
2139111	ATM	ATMEGA328P-PU	DIP-28	32k flash, 8-bit, 20MHz, 23 I/O lines	4.95	4.49
2129334	ATM	A000048	DIP-28	32k flash, 8-bit, ATmega328, 23 I/O lines	5.49	4.95
114403	DAL	DS80C320-MCG	DIP-40	High speed LP micro, C-temp	10.95	8.95
1951035	ATM	AT89S8253-24PU	DIP-40	12k flash, 24MHz, 32 I/O, I-temp	4.95	4.49
248663	TI	MSP430F121AIPW	SSOP-20	16-bit MCU, flash, 8MHz 4k ROM, 14 I/O	1.95	1.49
1183970	CPS	CY8C24123A-24SXI	SOIC-8	4k flash, 256B SRAM	1.75	1.49

PARALLAX 50MIPS SX Microcontroller

Part No.	Mfr. Part No.	Description	1	10
162931	SX28AG/DP-G	DIP-28 50MIPS SX microcontroller	\$4.95	\$4.49

Micromint 80C52-BASIC Microcontroller

*Web Code: CAH

A custom-masked microcontroller with a full-featured 8k-byte ROM-resident BASIC-52 interpreter. 256 x 8-bit RAM.

- Full BASIC interpreter in ROM on a single chip
- Operates DC to 12MHz • "Stand-alone" software development
- On-chip oscillator and clock circuit
- Interrupts can be handled by BASIC or Assembly Language



Part No.	Mfr. Part No.	Description	1	10	50
125647	80C52BASIC	40-pin CPU 8-bit CMOS w/ BASIC interpreter	\$33.95	\$31.95	\$29.95

* ANA = Anachip | ATM = Atmel Semi | CPS = Cypress Semi | DAL = Dallas Semi | LAT = Lattice Semiconductor | MCH = Microchip | TI = Texas Instruments | + Manufacturer Varies

RoHS compliant product + This product is available in both RoHS and non-RoHS versions. Add an "R" before part number for RoHS version. Details on page 184.