



COMPONENT NEWS

PREPRODUCTION ENGINEERING

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COMPILED BY PRODUCT RELIABILITY INFORMATION

NO. 94

DATE

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INTEGRATED CIRCUITS

At present, fifty purchased IC's have received *TEKTRONIX* part numbers. I have listed them below as linear IC's, or as members of recognized digital IC families.

ECL (Emitter-coupled Logic)

MOTOROLA "MECL I"

MECL I is not recommended for new design. (MECL II is faster and lower priced.)

156-0002	MC358AG J-K flip-flop	10-lead "TO-5"
156-0003	MC357G 3-input gate	"
156-0004	MC354G Bias driver	"
156-0006	MC360G Dual 2-input gate	"
156-0007	MC352G R-S flip-flop	"
156-0008 Non-prod.	MC355G Gate expander	"

MOTOROLA "MECL II"

156-0022	MC1013P J-K flip-flop	14-lead dual in-line
156-0023	MC1001P 6-input gate	"
156-0024	MC1004P Dual 4-input gate	"
156-0025	MC1010P Quad 2-input gate	"

RTL (Resistor Transistor Logic)

FAIRCHILD "9900" series, 0-70°C

156-0010	"900" Buffer	8-lead epoxy
156-0011	"914" Dual 2-input gate	"
156-0012	"923" J-K flip-flop	"
156-0016	"997" Four bit shift register	14-lead dual in-line

FAIRCHILD "Counter Micrologic"

156-0001	C _μ L 9960 Decimal decoder/driver	16-lead dual in-line
156-0005 Non-prod.	C _μ L 9958 Decade counter	TO-99
156-0009 Non-prod.	C _μ L 9959 Buffer storage	16-lead dual in-line

MOTOROLA "800P" series

156-0018	MC817P Quad 2-input gate (mW)	14-lead dual in-line
156-0019	MC822P J-K flip-flop (mW)	"
156-0020	MC824P Quad 2-input gate	"
156-0021	MC889P Hex inverter	"
156-0028	MC826P J-K flip-flop	"
156-0044	MC890P Dual J-K flip-flop	"
156-0045	MC892P Triple 3-input gate	"
156-0046 Non-prod.	MC887P J-K flip-flop, inverter, 2 buffers	"
156-0050	MC825P Dual 4-input gate	"

TTL (Transistor Transistor Logic)

FAIRCHILD "9000" series

156-0029 "9016" Hex inverter 14-lead dual in-line

TEXAS INSTRUMENTS "74N" series

156-0030 SN7400N Quad 2-input positive NAND gate 14-lead dual in-line
156-0031 SN7454N 4-wide, 2-input AND-OR-INVERT gate "
156-0032 SN7493N 4-bit binary counter "
156-0034 SN7420N Dual 4-input positive NAND gate "
156-0035 SN7430N Single 8-input positive NAND gate "
156-0036 SN7440N Dual 4-input positive NAND buffer "
156-0037 SN7451N Dual 2-wide, 2-input AND-OR-INVERT gate "
156-0038 SN7472N J-K Master-slave flip-flop "
156-0039 SN7473N Dual J-K Master-slave flip-flop ""
156-0040 SN7475N Quad latch 16-lead dual in-line
156-0041 SN7474N Dual D flip-flop 14-lead dual in-line
156-0042 SN7476N Dual J-K Master-slave flip-flop 16-lead dual in-line
156-0043 SN7402N Quad 2-input positive NOR gate 14-lead dual in-line
156-0047 SN7410N Triple 3-input positive NAND gate "

MOS IC's

156-0051 T.I. TMS-7C-3003-LA Dual 100-bit shift register TO-100

Linear IC's

156-0013 FAIRCHILD μ A710C Differential comparator TO-99
156-0014 AMELCO 831BE Differential amplifier (Not 12-lead "TO-5"
recommended for new design)
156-0015 FAIRCHILD μ A709C Operational amplifier TO-99
& RAYTHEON
156-0017 RCA CA3015 Operational amplifier (Not 12-lead "TO-5"
recommended for new design)
156-0027 NSC LM201 Operation amplifier TO-99
156-0033 RCA CA3028A RF/IF amplifier TO-99
156-0048 RCA CA3046 Five transistor array 14-lead dual in-line
156-0049 FAIRCHILD μ 741C Operational amplifier TO-99

(Two power supply regulators are to receive part numbers soon.
For more information on linear IC's contact Don Roberts, Ext 6520.)

CONSIDERATIONS FOR DIGITAL IC APPLICATIONS

Several new instruments are to use "74N" series TTL. Approximately ten manufacturers are being considered as possible alternate sources for the TEXAS INSTRUMENTS's IC's listed above.

In general, TTL or DTL, rather than RTL will be recommended for applications requiring a large number of digital IC's.

A large number of complex functions ("MSI") are now available at reasonable prices in dual in-line packages. Most of these devices, including decade counters, binary counters, up/down counters, multiplexers, decoders, etc., use the same supply voltage (+5V) and logic levels of DTL and TTL. For more information on MSI (medium scale integration) devices now available, call Ext 7262.

-Bill Markwart