

FAIRCHILD INTERFACE

LINE DRIVERS/RECEIVERS/TRANSCIEVERS

LINE DRIVERS

Item	DEVICE NO. ⁽¹⁾	Function ⁽²⁾	Companion Receiver	Input Compatibility	Type Output	Output Configuration	Output Current mA (Typ)	t _{pd} -ns (Typ)	Supply Voltage V	Power Dissipation mW (Typ)	Drivers per Package	Logic/Connection Diagram(s)	Package(s)
1	μA1488	Quad	μA1489	TTL	Volt	Single Ended	±10	220	±15	—	4	I49	6A,9A
2	54/7437	Quad 2-NAND	Any TTL	TTL	Volt	Single Ended	48	10	+5.0	108	4	D2	3I, 6A,9A
3	54/7438	Quad 2-NAND	96106	TTL	Volt	Single Ended	48	13	+5.0	98	4	D2	3I, 6A,9A
4	54/7440	Dual 2-NAND	Any TTL	TTL	Volt	Single Ended	48	11	+5.0	52	2	D5	3I, 6A,9A
5	54H/74H40	Dual 2-NAND	Any TTL	TTL	Volt	Single Ended	48	7.0	+5.0	88	2	D5	3I, 6A,9A
6	54S/74S40	Dual 2-NAND	Any TTL	TTL	Volt	Single Ended	48	4.0	+5.0	88	2	D5	3I, 6A,9A
7	8T13	Dual	8T14	TTL	Volt	Single Ended	250 ⁽³⁾	20	+5.0	280	2	I21	4L 6B,9B
8	8T23	Dual IBM-370	8T24	TTL	Volt	Single Ended	250 ⁽³⁾	20	+5.0	280	2	I21	6B,9B
9	9009	Dual 2-NAND	Any TTL	TTL	Volt	Single Ended	48	10	+5.0	54	2	D5	3I,6A
10	9612	Dual	9613	TTL	Volt	Diff	50	14	+5.0	150	2	I23	6T,9T
11	9614	Dual	9615	TTL	Volt	Diff or Single	40	16	+5.0	170	2	I2	4L 6B,9B
12	9616	Triple RS232	9617, 9627	TTL	Volt	Single Ended	17	300	±12	250	3	I4	3I 6A,9A
13	9621	Dual	9622	TTL	Volt	Diff or Single	20	10	+5.0, +15	100	2	I7	3I,6A
14	9634	Dual	9637A	TTL, CMOS	Volt	Diff	±50	10	+5.0	200	2	I33	4L 6B,9B
15	9636	Dual	9637A	TTL, CMOS	Volt	Single Ended	±75	—	±9.0 to ±15	200	2	I34	6T,9T
16	9638	Dual	9637A	TTL	Volt	Diff	±50	10	+5.0	—	2	I36	6T,9T
17	10123/ 10523 ⁽⁴⁾	Triple Bus Dvr	All 10K ECL	ECL	Volt	Single Ended	20	3.0	-5.2	312	3	E78	4L, 6B,9B

1. In some cases, only commercial temperature range devices are listed. Please request specific information for military versions.

2. OC = open collector, 3S = 3-state

3. Foldback current limited

4. 105XX and 106XX denote military temperature range

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LINE DRIVERS (Cont'd)

Item	DEVICE NO. ⁽¹⁾	Function ⁽²⁾	Companion Receiver	Input Compatibility	Type Output	Output Configuration	Output Current mA (Typ)	t _{pd} -ns (Typ)	Supply Voltage V	Power Dissipation mW (Typ)	Drivers per Package	Logic/Connection Diagram(s)	Package(s)
1	10192/ 10592 ⁽⁴⁾	Quad	All ECL Logic	ECL	Volt	Single Ended	16	3.0	-5.2	510	4	E105	4L,6B
2	54S/ 74S140	Dual 2-NAND	Any TTL	TTL	Volt	Single Ended	40	4.0	+5.0	88	2	D5	3I, 6A,9A
3	54LS/ 74LS240	Octal Inverting Bus Dvr	Any TTL	TTL	Volt	Single Ended	40	12	+5.0	175	8	D73	9Z
4	54LS/ 74LS241	Octal Bus Dvr	Any TTL	TTL	Volt	Single Ended	40	12	+5.0	180	8	D74	9Z
5	54LS/ 74LS244	Octal Bus Dvr	Any TTL	TTL	Volt	Single Ended	40	12	+5.0	180	8	D77	9Z
6	54LS/ 74LS540	Octal 3S Inverting	Any TTL	TTL	Volt	Single Ended	40	12	+5.0	175	8	D80	9Z
7	54LS/ 74LS541	Octal 3S	Any TTL	TTL	Volt	Single Ended	40	12	+5.0	180	8	D81	9Z
8	55/75109	Dual	75107, 75108	TTL	Curr	Diff	6.0	9.0	±5.0	180	2	I14	3I 6A,9A
9	55/75110	Dual	75107, 75108	TTL	Curr	Diff	12	9.0	±5.0	285	2	I14	3I 6A,9A
10	55/75121	Dual	75122	TTL	Volt	Single Ended	250 ⁽³⁾	20	+5.0	280	2	I21	6B,9B
11	75123	Dual IBM-370	75124	TTL	Volt	Single Ended	250 ⁽³⁾	20	+5.0	280	2	I21	6B,9B
12	75150	Quad	75154	TTL DTL	Volt	Single Ended	15	20	±12	100	2	I51, 52	6A,6T, 9A,9T
13	96101	Quad 2-NAND OC	96106	TTL	Volt	Single Ended	80	13	+5.0	98	4	D3	TO-86 6A,9A
14	100123	Hex Bus Dvr	All 95K and 100K ECL	ECL	Volt	Single Ended	20	1.8	-4.5	730	6	E14	4Q
15	100194	Quint Duplex Bus Dvr	All 100K ECL	ECL	Volt	—	—	2.0	-4.5	—	—	E110	4Q,6Q

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LINE DRIVERS/RECEIVERS/TRANSCIEVERS

LINE RECEIVERS

Item	DEVICE NO. ⁽¹⁾	Function	Companion Driver	Output Compatibility	Input Threshold Sensitivity V _{TH} -V	Common Mode V	Hysteresis Capability	tpd-ns (Typ)	Supply Voltage V	Power Dissipation mW (Typ)	Receivers per Package	Logic/Connection Diagram	Package(s)
1	μ A1489	Quad RS232	μ A1488	TTL	+0.5	\pm 30	0.25V	220	—	—	4	I50	6A,9A
2	μ A1489A	Quad RS232	μ A1488	TTL	+0.5	\pm 30	1.0V	25	—	—	4	I50	6A,9A
3	8T14	Triple	8T13	TTL	—	+5.0	Yes	20	+5.0	315	3	I22	6B,9B
4	8T24	Triple IBM-370	8T23	TTL	—	+5.0	Yes	20	+5.0	315	3	I22	6B,9B
5	9582	Triple	All ECL Logic	ECL	V _{REF}	\pm 1.0	No	2.2	-5.2	250	3	E22	6B
6	9613	Dual Diff	9612	TTL	\pm 0.5	\pm 15	No	25	+5.0	143	2	I24	6T,9T
7	9615	Dual Diff	9614	TTL	\pm 1.0	\pm 15	No	30	+5.0	150	2	I3	4L,6B,9B
8	9617	Triple RS232	9616	TTL	+1.5	\pm 25	Yes	60	+5.0	60	3	I5	6A
9	9620	Dual Diff	9621	TTL	\pm 0.5	\pm 15	No	35	+5.0 -12	110	2	I6	3I,6A
10	9622	Dual	9621	TTL	+1.5	\pm 10	No	38	+5.0 -12	140	2	I8	3I,6A
11	9627	Dual RS232/ mil. std. 188	9616	TTL	+0.45	\pm 25	No	70	\pm 12	234	2	I11	4L 6B,9B
12	9637A	Dual RS422/423	9634, 9636, 9638	TTL	+0.2	\pm 15	0.3V	17	+5.0	—	2	I35	6T,9T
13	10014	Active Terminator	All ECL Logic	ECL	V _{REF}	—	No	—	-5.2	65	14	E18	4L 6B,9B
14	10114/ 10514 ⁽²⁾	Triple	All ECL Logic	ECL	V _{REF}	\pm 1.0	No	2.2	-5.2	145	3	E24	4L 6B,9B
15	10115/ 10515 ⁽²⁾	Quad	All ECL Logic	ECL	V _{REF}	+2.0	No	1.9	-5.2	95	4	E23	4L 6B,9B
16	10116	Triple	All ECL Logic	ECL	V _{REF}	+2.0	No	1.9	-5.2	75	3	E24	4L 6B,9B
17	55/75107	Dual	75109 75110	TTL	\pm 25	\pm 3.0	No	17	\pm 5.0	130	2	I13	3I 6A,9A
18	55/75108	Dual	75109 75110	TTL	\pm 25	\pm 3.0	No	19	\pm 5.0	130	2	I13	3I 6A,9A

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LINE RECEIVERS (Cont'd)

Item	DEVICE NO. ⁽¹⁾	Function	Companion Driver	Output Compatibility	Input Threshold Sensitivity V_{TH-V}	Common Mode V	Hysteresis Capability	t_{pd-ns} (Typ)	Supply Voltage V	Power Dissipation mW (Typ)	Receivers per Package	Logic/Connection Diagram	Package(s)
1	55/75122	Triple	75121	TTL	—	+5.0	Yes	20	+5.0	315	3	I22	6B,9B
2	75124	Triple IBM-370	75123	TTL	—	+5.0	Yes	20	+5.0	315	3	I22	6B,9B
3	75154	Quad RS232	75150	TTL, DTL	2.2	± 15	Yes	22	+5.0 +12	200	4	I38	6A,9A
4	75207	Dual	75109 75110	TTL	± 10	± 3.0	No	17	± 5.0	130	2	I13	6A,9A
5	75208	Dual	75109 75110	TTL	± 10	± 3.0	No	19	± 5.0	130	2	I13	6A,9A
6	95115	Quad	All ECL Logic	ECL	V_{REF}	+2.0	No	1.9	-5.2	95	4	E23	6B
7	95116	Triple	All ECL Logic	ECL	V_{REF}	+2.0	No	1.9	-5.2	75	3	E24	6B
8	96106	Quad 2-NOR Bus	96101	TTL	1.5	—	No	20	+5.0	90	4	D39	TO-86 6A,9A
9	100114	Quint	All ECL Logic	ECL	V_{REF}	± 1.0	No	1.2	-4.5	380	5	E25	4Q

TRANSCIEVERS

Item	DEVICE NO.	Function ⁽²⁾	Driver Output Current-mA	Receiver Output Current-mA	Hysteresis Capability	Receiver t_{pd-ns}	Driver t_{pd-ns}	Transceivers per Package	Logic/Connection Diagram	Package(s)
10	8T26	Quad 3S	40	16	—	13	16	4	I53	6B,9B
11	8T28	Quad 3S	40	16	—	13	16	4	I54	6B,9B
12	9640/26S10	Quad OC Inverting	100	20	—	15	18	4	I37	6B,9B
13	9641/26S11	Quad OC	100	20	—	15	20	4	I55	6B,9B
14	9642	Quad OC Inverting	100	20	0.6V	15	18	4	I56	6B,9B

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LINE DRIVERS/RECEIVERS/TRANSCEIVERS

TRANSCEIVERS (Cont'd)

Item	DEVICE NO.	Function (2)	Driver Output Current-mA	Receiver Output Current-mA	Hysteresis Capability	Receiver t _{pd} -ns	Driver t _{pd} -ns	Transceivers per Package	Logic/Connection Diagram	Package(s)
1	54LS/74LS242	Quad Inverting 3S	40	40	0.4V	12	12	4	D75	3I,6A,9A
2	54LS/74LS243	Quad 3S	40	40	0.4V	12	12	4	D76	3I,6A,9A
3	54LS ⁽¹⁾ /74LS245	Octal 3S	40	40	0.4V	12	12	8	D79	9Z
4	100194 ⁽¹⁾	Duplex	—	—	—	2.0	1.1	5	E110	4Q,6Q

DISPLAY DRIVERS

DISPLAY DRIVERS

Item	DEVICE NO.	Function (2)	Input Compatibility	BCD Decoder	Ripple Blanking	Blanking Above BCD 9 Input	Output Current mA	Output Standoff Voltage-V (Max)	Active HIGH/LOW	Display Type	Standby Power Dissipation-mW	Logic/Connection Diagram	Package(s)
5	4511B	7-Seg Latch/Decoder/Dvr	CMOS	Yes	No	Yes	25	—	H	LED	0.015	C111	4L,6B,9B
6	4734B	7-Seg Latch/Decoder/Dvr	CMOS	Yes	Yes	Yes	25	—	H	LED	0.015	C114	7D,9M
7	4543B	7-Seg Latch/Decoder/Dvr	CMOS	Yes	No	Yes	—	—	H	LCD	0.015	C112	4L,6B,9B
8	54/7441	1-of-10 Cold Cathode	TTL	Yes	No	No	7.0	55	L	Gas Discharge	145	D140	4L,6B,9B
9	54/7445	1-of-10 OC Dvr	TTL	Yes	No	Yes	80	30	L	Common Anode	215	D135	4L,7B,9B
10	54/7446	7-Seg Decoder/Dvr	TTL	Yes	Yes	No	40	30	L	Common Anode	320	D143	4L,7B,9B
11	54/7447	7-Seg Decoder/Dvr	TTL	Yes	Yes	No	40	15	L	Common Anode	320	D143	4L,7B,9B
12	54LS/74LS47	7-Seg Decoder/Dvr	TTL	Yes	Yes	No	12	15	L	Common Anode	35	D143	4L,6B,9B
13	54/7448	7-Seg Decoder	TTL	Yes	Yes	No	8.0	5.5	H	—	265	D141	4L,7B,9B

1. To be announced
2. OC = open collector, 3S = 3-state