



Ordering Information

MICROCIRCUITS PRODUCT CODE EXPLANATION

MINIMUM ORDER \$50.00

MIXING PRIVILEGES:

Digital Circuits: (RT μ L, LPRT μ L, TT μ L, C μ L and CT μ L)

Digital circuits in the same temperature range and the same package may be mixed for price advantage within the following groups. Each group stands alone and may not be intermixed (Group 1 may not be mixed with Group 2, etc.).

Group 1:
All HT μ L and LPRT μ L may be mixed except for epoxy circuits.

Group 2:
All DT μ L, LPDT μ L and TT μ L (CCSL Devices) may be mixed.

Group 3:
CT μ L circuits may be mixed.

Group 4:
C μ L circuits may be mixed.

Linear Circuits (LIC):
Linear circuits may not be mixed.

MICROCIRCUITS PRODUCT CODE EXPLANATION

As Fairchild integrated circuits are available in a wide variety of package configurations and operating temperature ranges, it is essential that customers specify the exact circuit, package and temperature range desired.

There is a ten-digit product code used by all Fairchild distributors and field sales offices to identify integrated circuits in a particular package and temperature range. Proper use of this product code, explained in detail below, will ensure the expeditious handling of all customer orders.

A full range RT μ L 9900 in a TO-5 package is designated by code number U5D990021X. Breakdown of the code is as follows:

U	5D	9900	21	X
A	B	C	D	E

- A. Generic Device Type — U for microcircuits, H for hybrids, A for MOS/IC.
- B. Package Code (see table below).
- C. Basic Circuit Code.
- D. Temperature Range (see table below).
- E. This digit is used by LIC to indicate electrical class (see below).

B. PACKAGE CODE

FLAT PACKAGES

SIZE	MAXIMUM LEADS	NAME	CODE
1/4 x 3/16	10	Cerpak	3D
1/4 x 3/16	14	Cerpak	3E
1/4 x 1/4	10	Cerpak	3F
1/4 x 1/4	10	Flat Pack	3G
1/4 x 1/4	10	Glass	3H
1/4 x 1/4	14	Cerpak	3I
1/4 x 1/4	14	Flat Pack	3J
1/4 x 3/8	14	Cerpak	3K
1/4 x 3/8	16	Glass	3L
Custom			3S

PLUG-IN PACKAGES

SIZE	MAXIMUM LEADS	NAME	CODE
1/4 x 3/4	14	Dip	6A
1/4 x 3/4	16	Dip	6B
.520 x .850	16	Dip	6D
.255 x .750	14	Dip	6E
.255 x .550	10	Dip	6F
.252 x .767	14	Fairpak™	1A

TO-5

MAXIMUM LEADS	PINS USED	PINS SHORTED TO CAN	CODE
8	All 8 pins	None	5A
8	All 8 pins	4	5B
8	1, 2, 3, 4, 6 & 8 pins	4	5C
8	1, 3, 4, 5, 7 & 8 pins	4	5D
10	All 10 pins	None	5E
10	All 10 pins	5	5F
12	All 12 pins	None	5G
14	All 14 pins	None	5H
10	1, 2, 3, 4, 5, 6, 8, 9, 10 pins	None	5J
Custom			5S
EPOXY			
8	All 8 pins		8A
8	1, 3, 4, 5, 7 & 8 pins		8B
Custom			8S

C. Four digits are used for general product groups.

- 0000-0099 = Kits and kit parts
- 1000-1999 = Custom integrated circuits
- 5000-5999 = Second source integrated circuits
- 7000-7999 = Linear integrated circuits
- 9000-9999 = Digital integrated circuits

D. Two digits are used to indicate process and temperature range respectively.

- 14 = (−55°C to +85°C) Intermediate Range
- 19 = (0°C to +75°C) Industrial Range
- 21 = (−55°C to +125°C) Full Range Military Equipment
- 22 = (0°C to +100°C) Military Ground Support Equipment
- 28 = (+15°C to +55°C) Commercial Equipment
- 29 = (0°C to +70°C) Industrial Equipment
- 31 = (−55°C to +125°C) Full Range Military Equipment (LIC)
- 32 = (0°C to +85°C) Industrial Equipment (LIC)
- 39 = (0°C to +70°C) Industrial Equipment (LIC)
- 51 = (−55°C to +125°C) Full Range Military Equipment
- 56 = (−20°C to +100°C) Intermediate Range
- 59 = (0°C to +75°C) Industrial Equipment (DT μ L and C μ L)
- 59 = (+15°C to +55°C) Commercial Equipment (CT μ L)
- 79 = (+15°C to +55°C) Commercial Equipment (CT μ L) Clamped
- 79 = (0°C to +75°C) Counting Family (C μ L)

E. This digit is used by LIC to indicate electrical class.

- 1 = High performance Aerospace and Defense
- 2 = Standard Aerospace and Defense
- 3 = Industrial and Ground Aerospace and Defense
- 4 = Consumer

MICROCIRCUITS FAMILY DESIGNATIONS:

- C μ L = Counting Micrologic® Integrated Circuits
- CT μ L = Complementary Transistor Micrologic®
- C/DT μ L* = Diode Transistor Micrologic®
- C/LPDT μ L* = Low Power Diode Transistor Micrologic®
- RT μ L = Micrologic® Integrated Circuits
- LPRT μ L = Low Power Micrologic® Integrated Circuits (Formerly MW μ L)
- C/TT μ L* = Transistor Transistor Micrologic® (T²)
- LIC = Linear Integrated Circuits (Formerly ALC)
- MOS/IC = Metal over Silicon/Integrated Circuit

- *C/XX = Elements which are part of Fairchild Semiconductor's Compatible Current Sinking Logic (CCSL) family.
- MSI = Medium Scale Integration

ANSISTORS

EXPLANATIONS

MINIMUM ORDER \$50.00

MILITARY APPROVED DEVICES:

All Fairchild devices, which indicate type of approval and slash number (USN/177A), are approved to Military Specification 19500.

ASA ORDERS:

For all NASA orders placed with the factory for less than \$1,000.00, a \$100.00 data charge will be added.

MIXING PRIVILEGES:

There is no Transistor mixing privilege for price advantage.

TRANSISTORS TYPE DESIGNATION:

C = Chopper
DM = Dual & Miniature Devices
DR = Core Driver/Film Driver
EN = Epoxy
FET-NCJ = Field Effect Transistor-N
Channel Junction
GPA = General Purpose Amplifier

MOS/FET = Metal over Silicon/Field
Effect Transistor
MT = Microwave Transistor
PT/T = Transistor Photo Device
PWR = Power
RFP = RF Power
R&I = RF & IF Amplifier

RR = Radiation Resistant
SCR = Silicon Controlled
Rectifier
S/K = Sonobuoy Kit
SP = Special Product
Sw = Switch

HYBRIDS

MINIMUM ORDER \$50.00

MIXING PRIVILEGES:

Hybrid circuits may not be mixed.

HYBRIDS PRODUCT CODE EXPLANATION

The product code consists of a ten digit number giving all information necessary to properly identify the part.

For example: Product Code H/AG/2001/1/XX

Group Letter A/B / C / D/E

Group Letter Explanations:

- A. This digit indicates general product code. Currently and "H" is used by Hybrids.
B. Two letters are used to indicate the package as follows:

XC = TO-5, 3 lead header
AM = TO-5, 6 lead header
XK = TO-5, 8 lead header
AG = TO-5, 10 lead header
BW = TO-5, 12 lead header
BG = 1/4 x 1/4 Forbes Flat Package, 10 leads
BH = 1/4 x 1/4 Forbes Flat Package, 14 leads
BK = 3/8 x 3/8 Flat Package, 14 leads
BY = 1" x 0.8" Flat Package, 32 leads

- C. Four digits are used for general hybrid product groups.

0000-1999 = Custom Circuit
2000-2999 = Standard Hybrids — Digital
3000-3999 = Standard Hybrids — Linear
6000-6999 = Quads
9000-9999 = Hi Flyer

- D. One digit is used to indicate the operating temperature range.

1XX = (-55°C to +125°C) Full Range Military Equipment
8XX = (+15°C to +55°C) Commercial Equipment
9XX = (0°C to +70°C) Industrial Equipment

- E. Currently "XX" is used for these digits.

DIODES

MINIMUM ORDER \$50.00

MILITARY APPROVED DEVICES:

All Fairchild Devices, which indicate type of approval and slash number (JAN/177A), are approved to Military Specification 19500.

DIODE TYPE DESIGNATIONS:

FD 1, 2, 6 & 7 = Switching Diode Families
FD 3 = Low-Leakage Diode
HCD = Hot Carrier Diode
R = Reference Diode
VVC = Voltage Variable Capacitor
X = Zener Diode

PHOTO DEVICES AND COMPLEX OPTICAL ARRAYS

MINIMUM ORDER \$50.00

MILITARY APPROVED DEVICES:

All Fairchild devices, which indicate type of approval and slash number (USN/177A), are approved to Military Specification 19500.

MIXING PRIVILEGES: NONE

PHOTO DEVICES DESIGNATIONS:

ALD = Avalanche Luminescent Diode
PD = Photodiode
PT = Phototransistor
PTRA = Photo Tape Reader Array

COMPLEX OPTICAL ARRAYS DESIGNATIONS:

ALDA = Avalanche Luminescent Diode Array
IPDA = Integrated Photodiode Array
IPTA = Integrated Phototransistor Array

FAIRCHILD SALES OFFICES

HUNTSVILLE, ALABAMA

2109 W. Clinton Blvd. 35805
Suite 420
Tel: 205-536-4428
TWX: 810-726-2217

PHOENIX, ARIZONA

301 West Indian School Rd. 85013
Suite 103
Tel: 602-264-4948
TWX: 910-951-1544

LOS ALTOS, CALIFORNIA

Village Corner, Suite L
El Camino and San Antonio Rds. 94022
Tel: 415-941-3150
TWX: 910-370-7952

LOS ANGELES, CALIFORNIA

6922 Hollywood Blvd. 90028
Suite 818
Tel: 213-466-8393
TWX: 910-321-3009

DENVER, COLORADO

c/o Hyer Electronics
7895 E. Prentice
Englewood, Colorado 80110
Tel: 303-771-2231
TWX: 910-935-0706

HAMDEN, CONNECTICUT

Building 15
60 Connolly Parkway, Rm. 4 06514
Tel: 203-248-1888

FT. LAUDERDALE, FLORIDA

3440 N.E. 12th Ave., Rm. 2 33308
Tel: 305-566-7414
TWX: 510-955-9840

ORLANDO, FLORIDA

7040 Lake Ellenor Dr., Rm. 130 32809
Tel: 305-855-8012
TWX: 810-850-0152

ELMWOOD PARK, ILLINOIS

7310 West North Avenue 60635
Tel: 312-456-4200
TWX: 910-255-2064

COLLEGE PARK, MARYLAND

4911 Niagara Road 20740
Room 2C
Tel: 301-935-0351
TWX: 710-826-9654

WAKEFIELD, MASSACHUSETTS

Lakeside Office Park 01880
Room 2
Tel: 617-245-8880
TWX: 710-348-0424

DETROIT, MICHIGAN

24755 Five Mile Rd. 48239
Tel: 313-537-9520
TWX: 810-221-6936

MINNEAPOLIS, MINNESOTA

4901 W. 77th Street 55435
Room 104
Tel: 612-920-1030
TWX: 910-576-2944

ALBUQUERQUE, NEW MEXICO

c/o Hyer Electronics
210 La Veta N.E. 87108
Tel: 505-265-5767
TWX: 910-989-1679

JERICO, L. I., NEW YORK

50 Jericho Turnpike 11753
Tel: 516-334-8500
TWX: 510-222-4450

POUGHKEEPSIE, NEW YORK

44 Haight Avenue 12603
Tel: 914-454-7320
TWX: 510-248-0030

SYRACUSE, NEW YORK

731 James Street, Room 304 13203
Tel: 315-472-3391
TWX: 710-348-0424

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5000 Northbranch Lane 45414
Room 105
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TWX: 513-278-6688

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100 Old York Road 19046
Tel: 215-886-6623
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10210 Monroe, Suite 102 75229
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Bellevue, Washington 98004
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ONTARIO OFFICE

P.O. Box 160
1040 Martin Grove Road
Rexdale, Ontario, Canada
Tel: 416-248-0285
TWX: 610-492-2700

QUEBEC OFFICE

P.O. Box 238
Pointe Claire, Dorval, Quebec
Tel: 514-684-1516
TWX: 610-492-2700

FAIRCHILD SEMICONDUCTOR

TERMS AND CONDITIONS OF SALE

SCOPE—THE TERMS AND CONDITIONS OF SALE CONTAINED HEREIN APPLY TO ALL QUOTATIONS MADE AND PURCHASE ORDERS ENTERED INTO BY THE SELLER. THE SAID TERMS AND CONDITIONS MAY IN SOME INSTANCES CONFLICT WITH SOME OF THE TERMS AND CONDITIONS AFFIXED TO THE FORM OR ORDER BLANK AND/OR SPECIFIED BY THE BUYER. THEREFORE, ACCEPTANCE OF THE BUYER'S ORDER IS MADE ONLY ON THE EXPRESS UNDERSTANDING AND CONDITION THAT INsofar AS THE TERMS AND CONDITIONS OF THIS ACCEPTANCE CONFLICT WITH ANY TERMS AND CONDITIONS OF THE BUYER'S ORDER, THE TERMS AND CONDITIONS OF THIS ACCEPTANCE SHALL GOVERN, IRRESPECTIVE OF WHETHER THE BUYER ACCEPTS THESE CONDITIONS BY A WRITTEN ACKNOWLEDGMENT, BY IMPLICATION, OR ACCEPTANCE AND PAYMENT OF GOODS ORDERED HEREUNDER. SELLER'S FAILURE TO OBJECT TO PROVISIONS CONTAINED IN ANY COMMUNICATION FROM BUYER SHALL NOT BE DEEMED A WAIVER OF THE PROVISIONS OF THIS ACCEPTANCE. ANY CHANGES IN THE TERMS AND CONDITIONS OF SALE CONTAINED HEREIN MUST SPECIFICALLY BE AGREED TO IN WRITING BY THE GENERAL MANAGER OF THE SELLER BEFORE BECOMING BINDING ON EITHER THE SELLER OR THE BUYER.

All orders or contracts must be approved and accepted by the Seller at its home office.

The said terms and conditions of sale shall be applicable whether or not they are attached to or enclosed with the products to be sold or sold hereunder.

Prices quoted for the items described above and acknowledged hereby are firm and not subject to audit, price revision, or price redetermination.

TERMS OF PAYMENT—All invoices are due and payable 30 days from date of invoice. No discounts are authorized.

F. O. B. POINT—All sales are made F. O. B. point of shipment. Seller's title passes to Buyer and Seller's liability as to delivery ceases upon making delivery of material purchased hereunder to carrier at shipping point in good condition; the carrier acting as Buyer's agent. All claims for damages must be filed with the carrier. All shipments will normally be made by Parcel Post, Railway Express, Air Express or Air Freight. Unless specific instructions from Buyer specify which of the foregoing methods of shipment is to be used, the Seller will exercise his own discretion.

4. **DELIVERY**—Shipping dates are approximate and are based upon prompt receipt from Buyer of all necessary information. In no event will Seller be liable for any procurement costs, nor for delay or non-delivery, due to causes beyond its reasonable control, including but not limited to acts of God, acts of civil or military authority, priorities, fires, strikes, lockouts, slowdowns, factory or labor conditions, errors in manufacture and inability due to causes beyond the Seller's reasonable control to obtain necessary labor, materials, or manufacturing facilities. In the event of any such delay the date of delivery shall, at the request of the Seller, be deferred for a period equal to the time lost by reason of the delay.
5. **TAXES**—Unless otherwise specifically provided herein, the amount of any present or future sales, revenue, excise or other tax applicable to the products covered by this order or the manufacture or sale thereof, shall be added to the purchase price and shall be paid by the Buyer, or in lieu thereof the Buyer shall provide the Seller with a tax exemption certificate acceptable to the taxing authorities.
6. **PATENTS**—The Buyer shall hold the Seller harmless against any expense or loss resulting from infringement of patents or trademarks arising from compliance with Buyer's designs or specifications or instructions. The sale of products by the Seller does not convey any license, by implication, estoppel, or otherwise, under patent claims covering combinations of said products with other devices or elements.

Except as otherwise provided in the preceding paragraph, the Seller shall defend any suit or proceeding brought against the Buyer so far as based on a claim that any product, or any part thereof, furnished under this contract constitutes an infringement of any patent of the United States, if notified promptly in writing and given authority, information and assistance (at the Seller's expense) for the defense of same, and the Seller shall pay all damages and costs awarded therein against the Buyer. In case said product, or any part thereof, is in such suit held to constitute infringement and the use of said product or part is enjoined, the Seller shall, at its own expense, either procure for the Buyer the right to continue using said product or part, or replace same with non-infringing product, or modify it so it becomes

non-infringing, or remove said product and refund the purchase price and the transportation and installation costs thereof. The foregoing states the entire liability of the Seller for patent infringement by the said products or any part thereof.

7. **ASSIGNMENT**—The Buyer shall not assign his order or any interest therein or any rights thereunder without the prior written consent of Seller.
8. **WARRANTY**—The Seller warrants that the articles to be delivered under this purchase order will be free from defects in material and workmanship under normal use and service. Seller's obligations under this warranty are limited to replacing or repairing, at its option, at its factory, any of said articles which shall within one (1) year after shipment be returned to the Seller's factory of origin, transportation charges prepaid, and which are after examination, disclosed to the Seller's satisfaction to be thus defective. THIS WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE SELLER'S PART AND IT NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR THE SELLER ANY OTHER LIABILITIES IN CONNECTION WITH THE SALE OF THE SAID ARTICLES. This warranty shall not apply to any of such articles which shall have been repaired or altered except by the Seller, or which shall have been subjected to misuse, negligence, or accident. The aforementioned provisions do not extend the original warranty period of any article which has either been repaired or replaced by Seller.
9. **PAYMENTS**—If, in the judgment of the Seller, the financial conditions of the Buyer at any time does not justify continuation of production or shipment on the terms of payment originally specified, the Seller may require full or partial payment in advance, and, in the event of the bankruptcy or insolvency of the Buyer or in the event any proceeding is brought by or against the Buyer under the bankruptcy or insolvency laws, the Seller shall be entitled to cancel any order then outstanding and shall receive reimbursement for its cancellation charges.

Each shipment shall be considered a separate and independent transaction and payment therefor shall be made accordingly. If shipments are delayed by the Buyer, payments shall become due on the date when the Seller is prepared to make shipment. If the work covered by the purchase order is delayed by the Buyer, payments shall be made based on the purchase price and the percentage of completion. Products held for the Buyer shall be at the risk and expense of the Buyer. The Seller reserves the right to ship to its order and make collection by sight draft with bill of lading attached.

10. **GENERAL**—The Seller represents that with respect to the production of the articles and/or the performance of the services covered by this order, it will fully comply with all requirements of the Fair Labor Standards Act of 1938, as amended.

In no event shall any claim for consequential or special damages be made by either party.

11. **GOVERNMENT CONTRACT PROVISIONS**—If Buyer's original purchase order indicates, by Contract Number, that it is placed under a Government contract, the following provisions of the current Armed Services Procurement Regulation are applicable in accordance with the terms thereof, with an appropriate substitution of parties, as the case may be, i.e., "Contracting Officer" shall mean "Buyer," "Contractor" shall mean "Seller," and the term "Contract" shall mean this order.

7-103.1, Definitions; 7-103.3, Extras; 7-103.4, Variation in Quantity; 7-103.6, Responsibility for Supplies; 7-103.7, Payments; 7-103.8, Assignment of Claims; 7-103.9, Additional Bond Security; 7-103.10, Federal, State, and Local Taxes; 7-103.13, Renegotiation; 7-103.15, Soviet Controlled Areas; 7-103.16, Contract Work Hours Standards Act—Overtime Compensation; 7-103.17, Walsh-Healey Public Contracts Act; 7-103.18, Equal Opportunity; 7-103.19, Officials Not to Benefit; 7-103.20, Covenant Against Contingent Fees; 7-103.21, Termination for Convenience of the Government—(only to the extent that Buyer's contract is terminated for the convenience of the Government); 7-103.22, Authorization and Consent; 7-103.23, Notice and Assistance Regarding Patent Infringement; 7-104.3, Buy America Act; 7-104.4, Notice to the Government of Labor Disputes; 7-104.11, Excess Profit; 7-104.14, Utilization of Small Business Concerns; 7-104.15, Examination of Records; 7-104.20, Utilization of Concerns in Labor Surplus Areas.