Manufacturer Device Identification	Part Number Prefix	Part Number Suffix

INTERSIL (formerly Harris Semiconductor)

(Current)

(Discontinued)

Prefix

H Harris

Family
- **A** Analog
- **C** Communications
- **FA** Ultra-High Frequency Analog
- **I** Data Acquisition
- **IN** Interface
- **V** Analog High Voltage

Temperature Range
- **C** Commercial (0°C to +70°C)
- **I** Industrial (–40°C to +85°C)
- **M** Military (–55°C to +125°C)

Package Designator
- **A** Shrink Small Outline Plastic (SSOP)
- **B** Small Outline Plastic (SOIC)
- **C** Thin Small Outline Plastic (TSOP)
- **D** Ceramic Dual-In-Line Metal Seal (SBDIP)
- **J** Ceramic Dual-In-Line Frit-Seal (CERDIP)
- **L** Ceramic Leadless Chip Carrier (CLCC)
- **M** Plastic Leaded Chip Carrier (PLCC)
- **N or Q** Metric Plastic Quad Flatpack (MQFP)
- **P** Dual-In-Line Plastic (PDIP)
- **S** Single-In-Line Plastic (SIP)
- **T** Can
- **Y** Dice
- **W** Wafer
- **H** Metal Can TO-52
- **M** SOIC
- **E** Plastic DIP
- **N** Plastic DIP
- **S** Metal Can
- **F** Ceramic DIP
- **Q** Plastic Leaded Chip Carrier
- **H** SOT-23

Suffix
- **/863** Fully Compliant to MIL-STD-883 Class B/QML
- **96** Tape and Reel
- **-T** Tape and Reel
- **1** Tape and Reel

Prefix	Device				Suffix	
H	A	4341	B	C	B	96

Family
Part Number
Temperature
Package Designator

Family
- **ICL**
- **ICM**

Temperature Range
- **C** Commercial (0°C to +70°C)
- **I** Industrial (–25°C to +85°C or –40°C to +85°C) (Specified on data sheet)
- **M** Military (–55°C to +125°C)

Package
- **B** Small Outline Plastic (SOIC)
- **D** Ceramic Dual-In-Line Metal-Seal (SBDIP)
- **F** Ceramic Flatpack
- **I** 16 Pin (0.6 x 0.7 Pin Spacing) Hermetic Hybrid DIP
- **J** Ceramic Dual-In-Line Frit-Seal (CERDIP)
- **L** Ceramic Leadless Chip Carriers (CLCC)
- **M** Metric Plastic Quad Flatpack (MQFP)
- **P** Plastic Dual-In-Line
- **S** TO-52 Can
- **T** TO-5 (Also TO-78, TO-99, TO-100)
- **U** TO-72 (Also TO-18, TO-71)
- **Z** TO-92
- **/W** Wafer
- **/D** Chip

Suffix
- **/863B** Fully Compliant to MIL-STD-883 Class B/QML
- **T** Tape and Reel

Prefix	Device					Suffix
ICL	8069D	C	B	A		T

Device Family
Basic Device Type
Temperature Range
Package
Pin Count Designator

Manufacturer Device Identification	Part Number Prefix	Suffix

INTERSIL (continued)

Data Converters

Family
- **A** Analog
- **C** Communications
- **D** Digital
- **I** Interface
- **M** Memory
- **PL** Programmable Logic
- **S** Military/Aerospace

Package:
- **1** Ceramic DIP
- **1B** Brazed Seal
- **2** TO-5
- **3** Epoxy DIP
- **4** Leadless Carriers
- **4P** Plastic Leaded Chip Carrier
- **5** Ceramic Substrate
- **7** Mini DIP
- **9** Flat Pack
- **9P** Small Outline
- **0** Chip Form

Temperature Range
- **1** –55°C to +200°C
- **2** –55°C to +125°C
- **4** –25°C to +85°C
- **5** 0°C to +75°C
- **6** 100% 25°C Probe (Dice Only)
- **7** 0°C to +75°C with 96 hour burn-in
- **8** Dash 8 Program; hi-rel processing
- **9** –40°C to +85°C
- **9+** –40°C to +85°C with burn-in

Prefix	Device	Suffix
	H I 3 7151 –5	

Family — Package — Temperature

Data Converters

Family
- **CA** Linear ICs

Package
- **D** Ceramic DIP
- **E** Plastic DIP
- **F** CERDIP
- **M** Small-Oultine Plastic Package
- **N** PLCC
- **Q** Plastic-Chip-Carrier-Package
- **S** DIL T0-5
- **T** Con
- **Z** SIP

Prefix	Device	Suffix
CA	3306	A E

Device Type — Electrical Option — Package

Family
- **CD (AC, ACT, HC, HCT) Types**

Logic Level
- **AC** Advanced CMOS Logic CMOS Input Levels
- **ACT** Advanced CMOS Logic TTL Input Levels
- **HC** High Speed CMOS Logic CMOS Input Levels
- **HCT** High Speed CMOS Logic TTL Input Levels
- **HCU** High Speed CMOS Logic CMOS Input Levels, Unbuffered

Temperature Range
- **54/74** Refer to Individual Data Sheets for Temperature Range

Package Designator
- **E** Dual-In-Line Plastic (PDIP)
- **EN** Narrow Dual-In-Line Plastic (PDIP)
- **F** Ceramic Dual-In-Line Frit-Seal (CERDIP)
- **H** Chip
- **M** Small Outline Plastic (SOIC)
- **SM** Shrink Small Outline Plastic (SSOP)
- **W** Wafer

High Reliability Screening
- **3A** Fully Compliant with MIL-STD-883
- **X** Fully Compliant with MIL-STD-883
- **96** Tape and Reel

CD (AC, ACT, HC, HCT) Types

Prefix	Device	Suffix
CD	XX XXX XXXXX	X XX

Temperature Range — Logic Level — Type Designator — Package Designator — Hi-Reliability Screening

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Family
- **CD (FC, LPT) Types**

Logic Level
- **FCT** Bus Interface 5.0V and 3.3V Family
- **LPT** Low Power Technoloy 3.3V Family

Type Designation
Up to 6 units
- **16XXX** 16-Bit
- **162XXX** 16-Bit with Balanced Output Drivers
- **163XXX** 16-Bit 3.3V FCT
- **2XXX** Series 25Ω Output Resistor

Speed Grade
- **Blank** Lowest Speed
- **A**
- **B**
- **C**
- **D**
- **E** Highest Speed

Temperature Range
- **29/54/74** Refer to Individual Data Sheets for Temperature Range

Output Voltage
- **T** TTL Output Levels
- **Blank** Non-TTL Output Levels

Package Designator
- **E** Dual-In-Line Plastic (PDIP)
- **EN** Narrow Dual-In-Line Plastic (PDIP)
- **H** Chip
- **M** 300 Mil, Small Outline Plastic (SOIC)
- **NM** 150 Mil, Small Outline Plastic (SOIC)
- **MT** Thin Shrink Small Outline Plastic (TSSOP)
- **QM** Shrink Small Outline Plastic (SSOP/QSOP)
- **SM** Shrink Small Outline Plastic (SSOP)

Package Designator
- **Blank** Tube
- **96** Tape and Reel

CD (FCT, LPT) Types

Prefix	Device	Suffix
CD	XX XXX XXXXXX	X X X XX

Temperature Range — Logic Level — Type Designator — Speed Grade — Output Voltage — Package Designator — Pack Designator

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix

INTERSIL (continued)

Family
- **IP** Intelligent Power
- **V** High Voltage

Topology
- **0** Low Side Switch
- **1** High Side Switch
- **2** Half Bridge
- **3** AC/DC Converters
- **4** Full Bridge
- **5** Regulator/Power Supply
- **7** Multiplex Communication Circuit
- **9** Special Function

Sequential Number
Based on Order of Development 0-9

Package Designator
- **B** Small Outline Plastic (SOIC)
- **D** Chip
- **J** Ceramic Dual-In-Line Frit-Seal (CERDIP)
- **M** Plastic Leaded Chip Carrier (PLCC)
- **P** Dual-In-Line Plastic (PDIP)
- **S** Single-In-Line Plastic (SIP)
- **W** Wafer
- **Y** Die

Temperature
- **A** Automotive (-40°C to 150°C)
- **C** Commercial (0°C to 70°C)
- **I** Industrial (-40°C to 85°C)
- **M** Military (-55°C to 125°C)
- **D** EDP (0°C to 85°C)

Voltage
Multiply by 10 for Capability (i.e. 50 = 500V)
If Negative (-) is Used for First Digit, Do Not Mulitply by 10 (i.e. -5 = 5V)

HIP Types

Prefix	Device	Suffix
H	IP 2 50	0 I P

Family
Topology
Voltage
Sequential Number
Temperature
Package Designator

Family
CDP68H05C, HCL, HSC Types

Part Number
- **HC** Standard
- **HCL** Low Power
- **HSC** High Speed

Family Series
C4B, C8B, C16, J3, J4A, A2, P1, R1, R2, S1, T1, T3, W1

Sequential Number
Based on Order of Development 0-9

Package Designator
- **D** Ceramic Dual-In-Line Metal-Seal (SBDIP)
- **E** Dual-In-Line Plastic (PDIP)
- **N** Plastic Leaded Chip Carrier (PLCC)
- **Q** Metric Plastic Quad Flatpack (MQFP)
- **SE** Shrink Dual-In-Line Plastic (SDIP)
- **H** Chip
- **M** SOIC

CDO68HC05C, HCL, HSC Types

Prefix	Device	Suffix
CD68HC05C	C8E	E 20

Part Number
Family Series
Package Designator
Pin Count

Family
80CXXX Microprocessors
- **C** 0°C to +70°C
- **I** –40°C to +85°C
- **M** –55°C to +125°C
- **X** +25°C

Package
- **P** Plastic DIP
- **D** Ceramic DIP
- **R** Leadless Chip Carrier
- **S** Plastic Leaded Chip Carrier

Speed
µProcessors
- **Blank** 5MHz
- **2** 8MHz
- **–10** 10MHz
- **–12** 12MHz
- **–15** 15MHz
- **–25** 25MHz

Peripherals
- **5** 5MHz
- **Blank** 8MHz

Prefix	Device	Suffix
M D	80C86 –2	/B /883

Temperature Range
Package
Speed
–55°C to 125° with Burn-in
883 REVC Compliant

Memories

Family
- **M** Memory

Package
- **1** Ceramic DIP
- **1B** Brazed Seal
- **3** Plastic DIP
- **4** Leadless Carriers
- **5** Ceramic Substrate
- **6** Slimline
- **0** Chip Form
- **2** Metal Can
- **7** Ceramic DIP
- **9P** PDSO
- **4P** PLCC

Performance Grade
- **B** High Performance
- **C** Relaxed Specification
- **X** Very High Speed

Temperature Range
- **2** –55°C to +125°C
- **5** 0°C to +70°C
- **6** 100% 25° C Probe (Dice Only)
- **8** –55°C to +125°C With Burn-In
- **9** –40°C to +85°C With Burn-In
- **/883** Fully compliant to Mil-Std-883C

Prefix	Device	Suffix
H M 1	65162	B –9

Family
Package
Performance Grade
Temperature Range

Peripherals
Micro/Memory - 1800 Series

Family
- **CDP** Circuit Digital Processor
- **CMMXXX**
- **MW551XX** RAM

Package
- **E** Plastic DIP
- **D** Ceramic DIP Metal Seal
- **N,Q** PLCC

Voltage
- **–** 10 Volts
- **C** 5 Volts

Prefix	Device	Suffix
CDP	1802	A C E X

Performance Mode
Voltage
Package
Burn-in

Manufacturer Device Identification	Part Number Prefix	Suffix

INTERSIL (continued)

CDP65C51 Types

Family Series
- **A** Non-Standard Clear to Send (CTS) Operation
- **Blank** Standard Clear to Send (CTS) Operation

Speed Options
- **1** 1MHz Operation
- **2** 2MHz Operation
- **4** 4MHz Operation

Package Designator
- **E** Dual-In-Line Plastic (PDIP)
- **M** Small Outline Plastic (SOIC)
- **H** Chip

CDP65C51 Types

Prefix	Device		Suffix
CDP65C51	A	E	4

Part Number
Family Series
Package Designator
Speed Options

CDP6XXX Types

Part Number
CDP6818
CDP64XX

Screening Option
- **X** Enhanced Product Screening (i.e. Burn-In) (Optional for D.E. Package Types)

Package Designator
- **D** Ceramic Dual-In-Line Metal Seal (SBDIP)
- **E** Dual-In-Line Plastic (PDIP)
- **N** Plastic Leaded Chip Carrier (PLCC)
- **M** Small Outline Plastic (SOIC)
- **H** Chip

CDP65C51 Types

Prefix	Device		Suffix
CDP6XXX	E		4

Part Number
Package Designator
Speed Options

DG Types

Device Family and Prefix
Switches and MUXs

Temperature Range
- **A** -55°C to 125°C
- **B** 25°C to 85°C
- **C** 0°C to 70°C
- **D** -40°C to 85°C
- **E** -40°C to 85°C Extended Process Flow with Burn-in and 100% Temp Testing

High Reliability Designator
- **/883** Fully Compliant to MIL-STD-883 Class B/QML
- **/883B**

Tape and Reel
- **Y** Tape and Reel
- **T** Tape and Reel
- **1** Tape and Reel
- **3** Tape and Reel
- **X** Tape and Reel

Package Designator
- **Y** Small Outline Plastic (SOIC)
- **J** Dual-In-Line Plastic (PDIP)
- **K** Ceramic Dual-In-Line Frit-Seal (CERDIP)
- **N** Plastic DIP
- **D** Ceramic DIP
- **WM** SOIC
- **CD** Ceramic DIP
- **CN** Plastic DIP
- **E** Plastic DIP
- **J** Ceramic Leaded Chip Carrier
- **H** DIE
- **M** SOIC
- **T** Metal Can
- **S** Plastic SIP
- **V** Thin Quad Flatpack
- **A** SSOP
- **IA** SSOP
- **IA** Thin Quad Flatpack

Prefix	Device			Suffix
DG	XXXX	X	X	/883

Part Number
Temperature Range
Package Designation
High Reliability Designator

Digital Signal Processing

Family
- **MU** Multiplexer
- **MA** Multiplier/Accumulator
- **MP** Multimedia Products

Package
- **J** PLCC
- **G** PGA
- **N** Metric Quad Flat Pack

Temperature Range
- **C** Commercial 0°C to 70°C
- **I** Industrial –40°C to 85°C
- **M** Military –55°C to 125°C

Performance Grade
- **–35** 35ns
- **–45** 45ns
- **–55** 55ns
- **–60** 60ns
- **–65** 65ns
- **–75** 75ns

Prefix	Device			Suffix
H MU	16	JC	–35	/883

Family
Package
Temperature Range
Performance Grade
Hi Rel

Manufacturer Device Identification	Part Number Prefix	Suffix

INTERSIL (continued)

Family
SP Signal Processing

Device Type
43 Filters
45 Special Function
48 Image Processing
50 Down Conversion and Demodulation
95 Building Blocks

Package
J PLCC
G PGA Ceramic
D DIE
P DIP, Plastic
S SOIC
V MQFP
W Wafer

Temperature
C Commercial 0°C to 70°C
I Industrial –40°C to 85°C
M Military –55°C to 125°C

Performance Grade
–15 15MHz
–20 20MHz
–25 25 or 25.6MHz
–30 30MHz
–33 33MHz
–40 40MHz

Prefix	Device	Suffix
H SP	43 XXX	JC–15/883

Family
Device Type
Package
Temperature Range
Performance Grade
Hi Rel

High Reliability

CA3000 Linear Series

Package
D Dual-In-Line Metal-Seal Ceramic
F Dual-In-Line Frit-Seal Ceramic
T TO-5 Metal Can
S DIL Formed TO-5
J Leadless Chip Carrier

Prefix	Device	Suffix
C A	3130	T /3

Package
Reliability Screening Level

High Reliability (continued)

CDM, CDP, CMM, GP CMOS LSI

Revision
A 1st
B 2nd, etc.

Package
D Dual-In-Line
J Leadless Chip Carrier
K Flatpack

Product Assurance Level
3 Modified Class Q
IRZ Modified Class V Rad-Hard 10^5

Prefix	Device	Suffix
CDM	6264	A D /3

Revision
Package
Product Assurance Level

CD4000 Types

Supply Voltage
A 12V Max
B 18V Max
UB 18V Max, Unbuffered

High Reliability Screening
3 Non-Compliant with MIL-STD-883 Class B
3A Fully Compliant with MIL-STD-883 Class B
X 160 Hour Burn-in (125°C)
R Radiation Hardened
MS Class S Compliant
MSH MS+10e6 (Si) Radiation Hardened
MSR MS+10e5 (Si) Radiation Hardened
I Class S Modified
IRZ 10e5 Rads (Si) Radiation Hardened
3Z Class B+10e5 (Si) Radiation Hardened
BH Jan Class B+10e6 (Si) Radiation Hardened
BR Jan Class B+10e5 (Si) Radiation Hardened
SH Jan Class S+10e6 (Si) Radiation Hardened
SR Jan Class S+10e5 (Si) Radiation Hardened

Package Designator
E Dual-In-Line Plastic (PDIP)
F Ceramic Dual-In-Line Frit-Seal (CERDIP)
K Ceramic Flatpack
M Small Outline Plastic (SOIC)
H Chip
W Wafer
Y Small Outline Package
J Dual In-Line (DIP)
D CDIP
H DIE

CD4000 Types

Prefix	Device	Suffix
CD	4XXXX	XX X X

Type Designation
Supply Voltage
Package Designator
High-Reliability Screening

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix

INTERSIL (continued)

CD4000 Radiation Hardened Types

Series
- **B** Buffered
- **UB** Unbuffered

Class
- **MS** Class V (Note 1)
- **NS** Class V with Neutron Irradiation (Note 1)

Package Designator
- **D** Ceramic Dual-In-Line Metal-Seal (SBDIP)
- **H** Die
- **K** Ceramic Flatpack

Hardness Assurance Level
- **R** 10^5 (100K RADS)

Note 1: Flight Units Must Be Ordered by SMD#.
A cross reference table is available on the Harris website at http:/www.semi.harris.com/datashees/smd/smd_xref.

CD4000 Radiation Hardened Types

Prefix	Device	Suffix
	CD4000 B F S R	

Part Number
Series
Package Designator
Class
High-Reliability Screening

IH Types

Device Family
Interface

Temperature Range
- **C** Commercial, 0°C to 70°C
- **I** Industrial, -40°C to 85°C
- **M** Military, -55°C to 125°C

Suffix
- **/883B** -55°C to 125°C Fully Compliant to MIL-STD-883, Class B/QML
- **/HR** -55°C to 125°C, Non-Compliant
- **/BI** With Burn-In
- **T** Tape and Reel

Pin Count Designator
- **A** 8
- **D** 14
- **E** 16
- **P** 20
- **W** 10 (0.230" pin circle isolated case)

IH Types

Prefix	Device	Suffix
	IH 5043 M J E	/883B

Device Family
Basic Part Number
Temperature Range
Package Designator
Pin Count Designator
Suffix