

AND8002/D

ECLinPS™, ECLinPS Lite™, ECLinPS Plus™, ECLinPS MAX™, and GigaComm™ Marking and Ordering Information Guide



ON Semiconductor®

<http://onsemi.com>

APPLICATION NOTE

Prepared by: Paul Shockman
ON Semiconductor
HFPD Applications Engineer

Introduction

This application note describes the device markings and ordering information for the following ON Semiconductor families (refer to the respective family data book for family information):

- ECLinPS
- ECLinPS Lite
- ECLinPS Plus
- ECLinPS MAX
- GigaComm

Note that data sheet information takes precedence over this application note if there are any differences.

Application Note Information

This application note is divided into the following sections:

- Section 1: Data Sheet Marking Diagrams – The diagrams provide identification, traceability, date, and packaging information.
- Section 2: Data Sheet Ordering Information Tables – The tables list the device order numbers for every available device configuration.

This application note also includes the following appendices:

- Appendix 1: ECLinPS Device Order Number and Marking tables.
- Appendix 2: ECLinPS Lite Device Order Number and Marking tables.
- Appendix 3: ECLinPS Plus Device Order Number and Marking tables.
- Appendix 4: ECLinPS MAX Device Order Number and Marking Tables.
- Appendix 5: GigaComm Device Order Number and Marking tables.

AND8002/D

SECTION 1: Data Sheet Marking Diagrams

Device Marking Examples

The marking format is dependent upon the device package, and larger device packages allow the inclusion of more information on the face of the device. On the larger packages where marking space permits, the Pb Free designator will be an additional suffix letter G added to the traceability and date code line. A marking example for the large 52-pin NB100LVEP222 is shown below. Note that the device marking includes the following coded information that is described in later sections:

- Code 1. Circuit Identification Code
- Code 2. Temperature Compensation Code
- Code 3. Family Identification Code
- Code 4. Function Type Code
- Code 5. Assembly Location Traceability Code
- Code 6. Wafer Lot Traceability Code
- Code 7. Year Date Code
- Code 8. Work Week Date Code
- Code 9. Pb Free Designator

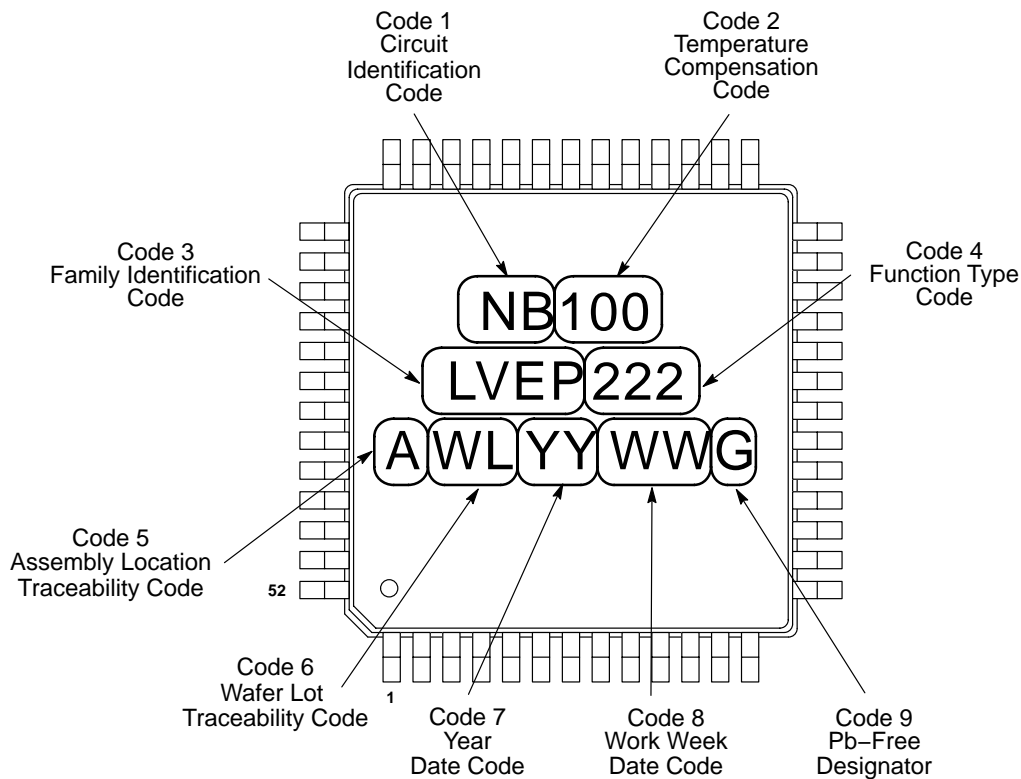


Figure 1. 52-Pin Marking Example

A marking example for the 8-pin TSSOP MC100EP16 device is shown in Figure 2. Note that the 8-pin package does not allow for as much marking information as the 52-pin package. On the smaller package where marking space is limited, the Pb Free designator will be an additional "Dot" centered below the traceability and date code line, or else a "Microdot" positioned below the right side of the traceability and date code line.

AND8002/D

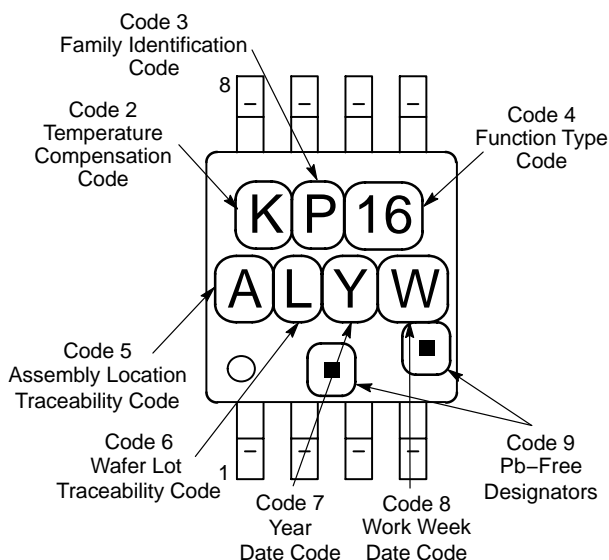


Figure 2. 8-Pin Marking Example

Code 2. Temperature Compensation Code

There are two Temperature Compensation codes. The “10” code indicates that the device characteristics are temperature dependent (refer to AND8066/D for additional information). The “100” identification code indicates that the device characteristics are not temperature dependent.

Code 3. Family Identification Code

Family Identification Codes are shown in the following table.

Code 1. Circuit Identification Code

MC identifies Motorola Circuits that are now owned by ON Semiconductor. NB identifies circuits that were introduced by ON Semiconductor. XC (X on 8-pin packages) identifies Preproduction/Prereliability devices, and PC (P on 8-pin packages) identifies Prototype devices. Contact ON Semiconductor for further information on non-released device markings.

Table 1. Family Identification Codes

Family	TSSOP-8 Code 3	SO-8 Code 3	BGA Code 3	Over 8-Pin Code 3
ECLinPS	N/A	N/A	N/A	E
Low Voltage ECLinPS	N/A	N/A	N/A	LVE
ECLinPS Lite	L	EL	N/A	EL
ECLinPS Lite Translator	T	LT	N/A	ELT
Low Voltage ECLinPS Lite	V	VL	N/A	LVEL
Low Voltage ECLinPS Lite Translator	R	VT	N/A	LVELT
ECLinPS Plus	P	EP	N/A	EP
ECLinPS Plus Translator	A	PT	N/A	EPT
Low Voltage ECLinPS Plus	U	VP	N/A	LVEP
GigaComm	N/A	N/A	SG	N/A
ECLinPS MAX	N/A	N/A	N/A	6L

Code 4. Function Type Code

Each device is assigned a unique function type identifier.

Code 5. Assembly Location Traceability Code

The one character Assembly Location Traceability Codes identify the final assembly location and are shown in the following table.

AND8002/D

Table 2. Assembly Location Traceability Codes

Code 5	Assembly Site		Location
2	AIT	Advanced Interconnect Technologies	Batam Island, Indonesia
5	ATP1	Amkor Technology Philippines	Manila, Philippines
9	ASAT	ASAT Holdings Limited	New Territories, Hong Kong
G (or G5)	NSEB		Bangkok, Thailand
K	ASEK	ASE (Korea) Inc.	Seoul, Korea
P	OSPI	ON Semiconductor Carmona	Carmona, Philippines
R		ON Semiconductor Sbn	Seremban, Malaysia
X	ASECL	ASE-Chung Li (METL)	Chung-Li, Taiwan

AND8002/D

Code 6: Wafer Lot Traceability Code

The use of a one or two character Wafer Lot Traceability Code is dependent upon the package size and is shown in Table 3. The Wafer Lot Traceability Code in conjunction with the Work Week Date Code provides unique wafer lot identification.

Code 7: Year Date Code

The use of a one or two character Year Date Code is dependent upon the package size and as shown in Table 3.

Code 8: Work Week Date Code

The use of a one or two character Work Week Date Code is dependent upon the package size and is listed in Table 3.

Traceability and Date Code Tables

The coding and an example for each available package type is shown in Table 3. Note that the smaller packages use a one-character alpha code for the “Year”, and a one-character alpha code for the “Work Week”. The alpha codes are deciphered in Table 4.

Table 3. Traceability and Date Code Markings and Examples

Package	Traceability Codes		Date Codes	
	Assembly Code (Code 5)	Wafer Lot (Code 6)	Year (Code 7)	Work Week (Code 8)
CDIP-16 Example	A	WL	YY	WW
	5 ATP1	AA First Lot	96 1996	46 46th Week
EIAJ SO-14 Example	A	L	Y	W
	X ASE CL	B Second Lot	B End 2002	T 46th Week
FCBGA-16 Example	None	L	Y	W
	K ASE K	A First Lot	B End 2002	T 46th Week
LQFP-32, LQFP-52, LQFP-64 Example	A	WL	YY	WW
	X ASE CL	AA First Lot	96 1996	46 46th Week
PLCC-20, PLCC-28 Example	A	WL	YY	WW
	P OSPI	AA First Lot	96 1996	46 46th Week
QFN-10, QFN-24 Example	A	L	Y	W
	9 ASAT	B Second Lot	B End 2002	T 46th Week
SO-8 Example	A	L	Y	W
	X ASE CL	B Second Lot	B End 2002	T 46th Week
SO-16 Example	A	WL	Y	WW
	X ASE CL	AA First Lot	B End 2002	46 46th Week
SO-20 Example	A	WL	YY	WW
	2 AIT	AA First Lot	96 1996	46 46th Week
TSSOP-8, TSSOP-16, TSSOP-20 Example	A	L	Y	W
	5 ATP1	B Second Lot	B End 2002	T 46th Week

AND8002/D

Table 4. Alpha Year and Work Week Date Codes

Alpha Year Date Codes (Code 7)		Alpha Work Week Date Codes (Code 8)	
Year	First or Second Half-Year	First Half-Year Work Week	Second Half-Year Work Week
A = 1989, 2002	First Half	A = 01	A = 27
B = 1989, 2002	Second Half	B = 02	B = 28
C = 1990, 2003	First Half	C = 03	C = 29
D = 1990, 2003	Second Half	D = 04	D = 30
E = 1991, 2004	First Half	E = 05	E = 31
F = 1991, 2004	Second Half	F = 06	F = 32
G = 1991, 2005	First Half	G = 07	G = 33
H = 1991, 2005	Second Half	H = 08	H = 34
I = 1993, 2006	First Half	I = 09	I = 35
J = 1993, 2006	Second Half	J = 10	J = 36
K = 1994, 2007	First Half	K = 11	K = 37
L = 1994, 2007	Second Half	L = 12	L = 38
M = 1995	First Half	M = 13	M = 39
N = 1995	Second Half	N = 14	N = 40
O = 1996	First Half	O = 15	O = 41
P = 1996	Second Half	P = 16	P = 42
Q = 1997	First Half	Q = 17	Q = 43
R = 1997	Second Half	R = 18	R = 44
S = 1998	First Half	S = 19	S = 45
T = 1998	Second Half	T = 20	T = 46
U = 1999	First Half	U = 21	U = 47
V = 1999	Second Half	V = 22	V = 48
W = 2000	First Half	W = 23	W = 49
X = 2000	Second Half	X = 24	X = 50
Y = 2001	First Half	Y = 25	Y = 51
Z = 2001	Second Half	Z = 26	Z = 52

Package Information

The marking diagram includes the following package information:

- Package: The industry standard designation for the package.
- Package Suffix: This suffix is used to order the device, and is part of the device order number listed in the

Ordering Information table. Refer to the following “Ordering Information” section.

- Package Case Number: The industry standard case designation for the package.

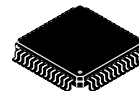
Packaging information examples from the MC100EP16 and NB100LVEP222 data sheets are shown below.



SO-8
D SUFFIX
CASE 751



TSSOP-8
DT SUFFIX
CASE 948R



52-LEAD LQFP
THERMALLY ENHANCED
CASE 848H
FA SUFFIX

Figure 3. 8-Pin Packaging Information Example

Figure 4. 52-Pin Packaging Information Example

AND8002/D

SECTION 2: Data Sheet Ordering Information Tables

Ordering Information Examples

Ordering Information tables from the MC100EP16, NB100LVEP222, and NBSG16 data sheets are shown below.

Table 5. Ordering Information Table Examples

Data Sheet	Ordering Information Table		
	Device	Package	Shipping
MC10/100EP16	MC10EP16D	SO-8	98 Units/Rail
	MC10EP16DR2	SO-8	2500 Tape & Reel
	MC100EP16D	SO-8	98 Units/Rail
	MC100EP16DR2	SO-8	2500 Tape & Reel
	MC10EP16DT	TSSOP-8	100 Units/Rail
	MC10EP16DTR2	TSSOP-8	2500 Tape & Reel
	MC100EP16DT	TSSOP-8	100 Units/Rail
	MC100EP16DTR2	TSSOP-8	2500 Tape & Reel
NB100LVEP222	NB100LVEP222FA	LQFP-52	160 Units/Tray
	NB100LVEP222FAR2	LQFP-52	1500 Tape & Reel
NBSG16	NBSG16BA	4x4 mm FCBGA-16	810 Units/Rail
	NBSG16BAR2	4x4 mm FCBGA-16	2500 Tape & Reel
	NBSG16BA100	4x4 mm FCBGA-16	100 Units/Tray
	NBSG16BA500R2	4x4 mm FCBGA-16	500 Tape & Reel

The following table decodes the device order numbers for some of the above examples. Note that the order number is made up of the Codes from the data sheet Marking Diagram. Refer to the previous “Code” sections for a description of the codes.

Table 6. Device Order Number Decoding

Device Order Number	Circuit Identification Code (Code 1)	Temperature Compensation Code (Code 2)	Family Identification Code (Code 3)	Function Type Code (Code 4)	Package Suffix
MC100EP16DT	MC Motorola Circuit	100	EP ECLinPS Plus	16 Unique Identifier	DT TSSOP-20
NB100LVEP222FA	NB ON Circuit	100	LVEP Low Voltage EP	222 Unique Identifier	FA LQFP-52
NBSG16BA	NB ON Circuit	N/A	SG GigaComm	16 Unique Identifier	BA FCBGA-16

AND8002/D

Package Suffix

The package suffixes are shown in the data sheet Marking Diagram. The package suffixes for all ECLinPS families and the GigaComm family are listed in the following table.

Table 7. ECLinPS and GigaComm Package Suffixes

Suffix	Package	Pins	Case	Description
BA	FCBGA-16	16	489	Ball Grid Array
D	SO-8	8	751	Small Outline IC
D	SO-16	16	751B	Small Outline IC
DT	TSSOP-8	8	948R	Thin Shrink Small Outline Package
DT	TSSOP-16	16	948F	Thin Shrink Small Outline Package
DT	TSSOP-20	20	948E	Thin Shrink Small Outline Package
DW	SO-20	20	751D	Small Outline IC
FA	LQFP-32	32	873A	Leaded Quad Flat Pack
FA	LQFP-52	52	848-D	Leaded Quad Flat Pack
FA	LQFP-52	52	848H	Leaded Quad Flat Pack
FA	LQFP-64	64	848G	Leaded Quad Flat Pack
FN	PLCC-20	20	775	Plastic Leaded Chip Carrier
FN	PLCC-28	28	776	Plastic Leaded Chip Carrier
L	CDIP-16	16	620	Ceramic DIP
M	EIAJ SO-14	14	965	EIAJ Small Outline IC
MN	QFN-16	16	485G	Quad Flat No-Lead
MN	QFN-24	24	485L	Quad Flat No-Lead
L	CDIP-16	16	620	Ceramic DIP
P	PDIP-16	16	648	Plastic DIP

Shipping Specification

The "Shipping" column in the Ordering Information table specifies the shipping configuration that corresponds to the device order number. Add R2 to the regular package suffix to order tape and reel shipping configurations. Refer to Brochure BRD8011/D for further tape and reel information.

AND8002/D

APPENDICES: Device Marking Tables

The tables are grouped by family and package. The “Device” column lists the device order number and the “Marking” column lists the corresponding marking for the device order number. The following appendices are included in this application note:

- Appendix 1: ECLinPS Device Order Number and Marking Tables.
- Appendix 2: ECLinPS Lite Device Order Number and Marking Tables.

- Appendix 3: ECLinPS Plus Device Order Number and Marking Tables.
- Appendix 4: ECLinPS MAX Device Order Number and Marking Tables.
- Appendix 5: GigaComm Device Order Number and Marking Tables.

APPENDIX 1: ECLinPS Device Order Number and Marking

16 LEAD CDIP L SUFFIX CASE 620	
DEVICE	MARKING
MC10E1651L	MC10E1651L
MC10E1652L	MC10E1652L
20 LEAD PLCC FN SUFFIX CASE 775	
DEVICE	MARKING
MC10E1651FN	MC10E1651FN
MC10E1652FN	MC10E1652FN
28 LEAD PLCC FN SUFFIX CASE 776	
DEVICE	MARKING
MC10E016FN	MC10E016FN
MC100E016FN	MC100E016FN
MC10E101FN	MC10E101FN
MC100E101FN	MC100E101FN
MC10E104FN	MC10E104FN
MC100E104FN	MC100E104FN
MC10E107FN	MC10E107FN
MC100E107FN	MC100E107FN
MC10E111FN	MC10E111FN
MC100E111FN	MC100E111FN
MC10E112FN	MC10E112FN
MC100E112FN	MC100E112FN
MC10E116FN	MC10E116FN
MC100E116FN	MC100E116FN
MC10E122FN	MC10E122FN
MC100E122FN	MC100E122FN
MC10E131FN	MC10E131FN
MC100E131FN	MC100E131FN
MC10E136FN	MC10E136FN
MC100E136FN	MC100E136FN

28 LEAD PLCC FN SUFFIX CASE 776 (continued)	
DEVICE	MARKING
MC10E137FN	MC10E137FN
MC100E137FN	MC100E137FN
MC10E141FN	MC10E141FN
MC100E141FN	MC100E141FN
MC10E142FN	MC10E142FN
MC100E142FN	MC100E142FN
MC10E143FN	MC10E143FN
MC100E143FN	MC100E143FN
MC10E150FN	MC10E150FN
MC100E150FN	MC100E150FN
MC10E151FN	MC10E151FN
MC100E151FN	MC100E151FN
MC10E154FN	MC10E154FN
MC100E154FN	MC100E154FN
MC10E155FN	MC10E155FN
MC100E155FN	MC100E155FN
MC10E156FN	MC10E156FN
MC100E156FN	MC100E156FN
MC10E157FN	MC10E157FN
MC100E157FN	MC100E157FN
MC10E158FN	MC10E158FN
MC100E158FN	MC100E158FN
MC10E160FN	MC10E160FN
MC100E160FN	MC100E160FN
MC10E163FN	MC10E163FN
MC100E163FN	MC100E163FN
MC10E164FN	MC10E164FN
MC100E164FN	MC100E164FN
MC10E166FN	MC10E166FN
MC100E166FN	MC100E166FN

AND8002/D

APPENDIX 1: ECLinPS Device Order Number and Marking (continued)

28 LEAD PLCC FN SUFFIX CASE 776 (continued)	
DEVICE	MARKING
MC10E167FN	MC10E167FN
MC100E167FN	MC100E167FN
MC10E171FN	MC10E171FN
MC100E171FN	MC100E171FN
MC10E175FN	MC10E175FN
MC100E175FN	MC100E175FN
MC10E193FN	MC10E193FN
MC100E193FN	MC100E193FN
MC10E195FN	MC10E195FN
MC100E195FN	MC100E195FN
MC10E196FN	MC10E196FN
MC100E196FN	MC100E196FN
MC10E197FN	MC10E197FN
MC100E210FN	MC100E210FN
MC10E211FN	MC10E211FN
MC100E211FN	MC100E211FN
MC10E212FN	MC10E212FN
MC100E212FN	MC100E212FN
MC10E241FN	MC10E241FN
MC100E241FN	MC100E241FN

28 LEAD PLCC FN SUFFIX CASE 776 (continued)	
DEVICE	MARKING
MC10E256FN	MC10E256FN
MC100E256FN	MC100E256FN
MC100E310FN	MC100E310FN
MC100E336FN	MC100E336FN
MC100E337FN	MC100E337FN
MC10E404FN	MC10E404FN
MC100E404FN	MC100E404FN
MC10E411FN	MC10E411FN
MC10E416FN	MC10E416FN
MC100E416FN	MC100E416FN
MC10E431FN	MC10E431FN
MC100E431FN	MC100E431FN
MC10E445FN	MC10E445FN
MC100E445FN	MC100E445FN
MC10E446FN	MC10E446FN
MC100E446FN	MC100E446FN
MC10E451FN	MC10E451FN
MC100E451FN	MC100E451FN
MC10E452FN	MC10E452FN
MC100E452FN	MC100E452FN
MC10E457FN	MC10E457FN
MC100E457FN	MC100E457FN
MC100LVE111FN	MC100LVE111
MC100LVE210FN	MC100LVE210
MC100LVE310FN	MC100LVE310
32 LEAD LQFP FA SUFFIX CASE 873A	
DEVICE	MARKING
MC100LVE164FA	MC100LVE164
52 LEAD TQFP FA SUFFIX CASE 848D	
DEVICE	MARKING
MC100LVE222FA	MC100LVE222

AND8002/D

APPENDIX 2: ECLinPS Lite Device Order Number and Marking

8 LEAD SOIC D SUFFIX CASE 751	
DEVICE	MARKING
MC10EL01D	HEL01
MC100EL01D	KEL01
MC10EL04D	HEL04
MC100EL04D	KEL04
MC10EL05D	HEL05
MC100EL05D	KEL05
MC10EL07D	HEL07
MC100EL07D	KEL07
MC10EL11D	HEL11
MC100EL11D	KEL11
MC10EL12D	HEL12
MC100EL12D	KEL12
MC10EL16D	HEL16
MC100EL16D	KEL16
MC10EL31D	HEL31
MC100EL31D	KEL31
MC10EL32D	HEL32
MC100EL32D	KEL32
MC10EL33D	HEL33
MC100EL33D	KEL33
MC10EL35D	HEL35
MC100EL35D	KEL35
MC10EL51D	HEL51
MC100EL51D	KEL51
MC10EL52D	HEL52
MC100EL52D	KEL52
MC10EL58D	HEL58
MC100EL58D	KEL58
MC10EL89D	HEL89
MC100EL1648D	K1648
MC10ELT20D	HLT20
MC100ELT20D	KLT20
MC10ELT21D	HLT21
MC100ELT21D	KLT21
MC10ELT22D	HLT22
MC100ELT22D	KLT22
MC100ELT23D	KLT23
NB100ELT23LD	KT23L
MC10ELT24D	HLT24
MC100ELT24D	KLT24

8 LEAD SOIC D SUFFIX CASE 751 (continued)	
DEVICE	MARKING
MC10ELT25D	HLT25
MC100ELT25D	KLT25
MC10ELT28D	HLT28
MC100ELT28D	KLT28
MC100LVEL01D	KVL01
MC100LVEL05D	KVL05
MC100LVEL11D	KVL11
MC100LVEL12D	KVL12
MC100LVEL16D	KVL16
MC100LVEL31D	KVL31
MC100LVEL32D	KVL32
MC100LVEL33D	KVL33
MC100LVEL51D	KVL51
MC100LVEL58D	KVL58
MC100LVELT22D	KVT22
MC100LVELT23D	KVT23
8 LEAD TSSOP DT SUFFIX CASE 948R	
DEVICE	MARKING
MC10EL01DT	HL01
MC100EL01DT	KL01
MC10EL04DT	HL04
MC100EL04DT	KL04
MC100EL05DT	HL05
MC100EL05DT	KL05
MC10EL07DT	HL07
MC100EL07DT	KL07
MC10EL11DT	HL11
MC100EL11DT	KL11
MC10EL12DT	HL12
MC100EL12DT	KL12
MC10EL16DT	HL16
MC100EL16DT	KL16
MC10EL31DT	HL31
MC100EL31DT	KL31
MC10EL32DT	HL32
MC100EL32DT	KL32
MC10EL33DT	HL33
MC100EL33DT	KL33

AND8002/D

APPENDIX 2: ECLinPS Lite Device Order Number and Marking (continued)

8 LEAD TSSOP DT SUFFIX CASE 948R (continued)	
DEVICE	MARKING
MC10EL35DT	HL35
MC100EL35DT	KL35
MC10EL51DT	HL51
MC100EL51DT	KL51
MC10EL52DT	HL52
MC100EL52DT	KL52
MC10EL58DT	HL58
MC100EL58DT	KL58
MC10EL89DT	HL89
MC100EL1648DT	1648
MC10ELT20DT	HT20
MC100ELT20DT	KT20
MC10ELT21DT	HT21
MC100ELT21DT	KT21
MC10ELT22DT	HT22
MC100ELT22DT	KT22
MC100ELT23DT	KT23
NB100ELT23LDT	K23L
MC10ELT24DT	HT24
MC100ELT24DT	KT24
MC10ELT25DT	HT25
MC100ELT25DT	KT25
MC10ELT28DT	HT28
MC100ELT28DT	KT28
MC100LVEL01DT	KV01
MC100LVEL05DT	KV01
MC100LVEL11DT	KV11
MC100LVEL12DT	KV12
MC100LVEL16DT	KV16
MC100LVEL31DT	KV31
MC100LVEL32DT	KV32
MC100LVEL33DT	KV33
MC100LVEL51DT	KV51
MC100LVEL58DT	KV58
MC100LVELT22DT	KR22
MC100LVELT23DT	KR23

14 LEAD SOIC EIAJ M SUFFIX CASE 965	
DEVICE	MARKING
MC100EL1648M	EL1648
16 LEAD SOIC D SUFFIX CASE 751B	
DEVICE	MARKING
MC10EL15D	10EL15
MC100EL15D	100EL15
MC10EL34D	10EL34
MC100EL34D	100EL34
MC10EL57D	10EL57
MC100EL57D	100EL57
20 LEAD SOIC DW SUFFIX CASE 751D	
DEVICE	MARKING
MC100EL13DW	MC100EL13
MC100EL14DW	MC100EL14
MC100EL17DW	MC100EL17
MC100EL29DW	MC100EL29
MC100EL30DW	100EL30
MC100EL38DW	MC100EL38
MC100EL39DW	MC100EL39
MC100EL56DW	MC100EL56
MC100EL59DW	100EL59
MC100EL90DW	100EL90
MC100EL91DW	100EL91
MC100LVEL13DW	100LVEL13
MC100LVEL14DW	100LVEL14
MC100LVEL17DW	100LVEL17
MC100LVEL29DW	100LVEL29
MC100LVEL30DW	100LVEL30
MC100LVEL37DW	100LVEL37
MC100LVEL38DW	100LVEL38
MC100LVEL39DW	100LVEL39
MC100LVEL40DW	100LVEL40
MC100LVEL56DW	100LVEL56
MC100LVEL59DW	100LVEL59
MC100LVEL90DW	100LVEL90
MC100LVEL91DW	100LVEL91
MC100LVEL92DW	100LVEL92

AND8002/D

APPENDIX 3: ECLinPS Plus Device Order Number and Marking

8 LEAD SOIC D SUFFIX CASE 751	
DEVICE	MARKING
MC10EP01D	HEP01
MC100EP01D	KEP01
MC10EP05D	HEP05
MC100EP05D	KEP05
MC10EP08D	HEP08
MC100EP08D	KEP08
MC10EP11D	HEP11
MC100EP11D	KEP11
MC10EP16D	HEP16
MC100EP16D	KEP16
MC100EP16FD	KEP60
MC10EP16TD	HEP61
MC100EP16TD	KEP61
MC10EP16VAD	HEP64
MC100EP16VAD	KEP64
MC100EP16VBD	KEP65
MC100EP16VCD	KEP66
MC100EP16VSD	KEP62
MC100EP16VTD	KEP63
MC10EP31D	KEP31
MC100EP31D	HEP31
MC10EP32D	HEP32
MC100EP32D	KEP32
MC10EP33D	HEP33
MC100EP33D	KEP33
MC10EP35D	HEP35
MC100EP35D	KEP35
MC10EP51D	HEP51
MC100EP51D	KEP51
MC10EP52D	HEP52
MC100EP52D	KEP52
MC10EP58D	HEP58
MC100EP58D	KEP58
MC10EP89D	HEP89
MC100EP140D	KP140
MC10EPT20D	HPT20
MC100EPT20D	KPT20
MC100EPT21D	KPT21
MC100EPT22D	KPT22

8 LEAD SOIC D SUFFIX CASE 751 (continued)	
DEVICE	MARKING
MC100EPT23D	KPT23
MC100EPT24D	KPT24
MC100EPT25D	KPT25
MC100EPT26D	KPT26
MC10LVEP11D	HVP11
MC100LVEP11D	KVP11
MC10LVEP16D	HVP16
MC100LVEP16D	KVP16
8 LEAD TSSOP DT SUFFIX CASE 948R	
DEVICE	MARKING
MC10EP01DT	HP01
MC100EP01DT	KP01
MC10EP05DT	HP05
MC100EP05DT	KP05
MC10EP08DT	HP08
MC100EP08DT	KP08
MC10EP11DT	HP11
MC100EP11DT	KP11
MC10EP16DT	HP16
MC100EP16DT	KP16
MC100EP16FDT	KP60
MC100EP16TDT	HP61
MC100EP16TDT	KP61
MC100EP16VADT	HP64
MC100EP16VADT	KP64
MC100EP16VBDT	KP65
MC100EP16VCDT	KP66
MC100EP16VSDT	KP62
MC100EP16VTDT	KP63
MC10EP31DT	HP31
MC100EP31DT	KP31
MC10EP32DT	HP32
MC100EP32DT	KP32
MC10EP33DT	HP33
MC100EP33DT	KP33
MC10EP35DT	HP35
MC100EP35DT	KP35

AND8002/D

APPENDIX 3: ECLinPS Plus Device Order Number and Marking (continued)

8 LEAD TSSOP DT SUFFIX CASE 948R (continued)	
DEVICE	MARKING
MC10EP51DT	HP51
MC100EP51DT	KP51
MC10EP52DT	HP52
MC100EP52DT	KP52
MC10EP58DT	HP58
MC100EP58DT	KP58
MC10EP89DT	HP89
MC10EPT20DT	HT20
MC100EPT20DT	KT20
MC100EPT21DT	KA21
MC100EPT22DT	KA22
MC100EPT23DT	KA23
MC100EPT24DT	KA24
MC100EPT25DT	KA25
MC100EPT26DT	KA26
MC10LVEP11DT	HU11
MC100LVEP11DT	KU11
MC10LVEP16DT	HU16
MC100LVEP16DT	KU16
10 LEAD QFN MP SUFFIX CASE 485C	
DEVICE	MARKING
MC100EP16VSMP	KP62
16 LEAD SOIC D SUFFIX CASE 751B	
DEVICE	MARKING
MC100LVEP34D	100LVEP34
16 LEAD TSSOP DT SUFFIX CASE 948F	
DEVICE	MARKING
MC100LVEP34DT	100 LVEP34
20 LEAD SOIC DW SUFFIX CASE 751D	
DEVICE	MARKING
MC10EP17DW	MC10EP17
MC100EP17DW	MC100EP17

20 LEAD SOIC DW SUFFIX CASE 751D (continued)	
DEVICE	MARKING
MC100EP56DW	MC100EP56
MC10EP139DW	MC10EP139
MC100EP139DW	MC100EP139
20 LEAD TSSOP DT SUFFIX CASE 948E	
DEVICE	MARKING
MC100EP14DT	100 EP14
MC10EP17DT	MC10 EP17
MC100EP17DT	100 EP17
MC10EP29DT	MC10 EP29
MC100EP29DT	100 EP29
MC100EP40DT	100 EP40
MC10EP56DT	MC10 EP56
MC100EP56DT	100 EP56
MC10EP57DT	MC10 EP57
MC100EP57DT	100 EP57
MC10EP90DT	MC10 EP90
MC100EP90DT	MC100 EP90
MC10EP139DT	HEP139
MC100EP139DT	KEP139
MC100LVEP14DT	100 VP14
NB100LVEP56DT	N100 VP56
24 LEAD QFN MN SUFFIX CASE 485L	
DEVICE	MARKING
NB100LVEP17MN	N100 LP17
NB100LVEP56MN	N100 VP56
32 LEAD LQFP FA SUFFIX CASE 873A	
DEVICE	MARKING
MC10EP016FA	MC10 EP016
MC100EP016FA	MC100 EP016
MC100EP016AFA	MC100 EP016A
MC10EP101FA	MC10 EP101
MC100EP101FA	MC100 EP101
MC10EP105FA	MC10 EP105

AND8002/D

APPENDIX 3: ECLinPS Plus Device Order Number and Marking (continued)

32 LEAD LQFP FA SUFFIX CASE 873A (continued)	
DEVICE	MARKING
MC100EP105FA	MC100 EP105
MC10EP116FA	MC10 EP116
MC100EP116FA	MC100 EP116
MC10EP131FA	MC10 EP131
MC100EP131FA	MC100 EP131
MC10EP142FA	MC10 EP142
MC100EP142FA	MC100 EP142
MC10EP195FA	MC10 EP195
MC100EP195FA	MC100 EP195
MC100EP196FA	MC100 EP196
MC100EP210SFA	MC100 EP210S
MC10EP445FA	MC10 EP445
MC100EP445FA	MC100 EP445
MC10EP446FA	MC10 EP446
MC100EP446FA	MC100 EP446
MC10EP451FA	MC10 EP451
MC100EP451FA	MC100 EP451
MC100EP809FA	MC100 EP809
MC100EPT622FA	MC100 EPT622
MC100LVEP111FA	MC100 LVEP111
MC100LVEP210FA	MC100 LVEP210

52 LEAD LQFP FA SUFFIX CASE 848H	
DEVICE	MARKING
NB100LVEP221FA	NB100 LVEP221
NB100LVEP222FA	NB100 LVEP222
64 LEAD LQFP FA SUFFIX CASE 848G	
DEVICE	MARKING
NB100EP223FA	NB100 EP223
NB100LVEP224FA	NB100 LVEP224

AND8002/D

APPENDIX 4: ECLinPS MAX Device Order Number and Marking

16 LEAD QFN MN SUFFIX CASE 485G	
DEVICE	MARKING
NB6L239MN	NB6L239
NB6N239SMN	NB6N239S
8 LEAD SOIC D SUFFIX CASE 751	
DEVICE	MARKING
NB6L16D	6L16
8 LEAD TSSOP DT SUFFIX CASE 948R	
DEVICE	MARKING
NB6L16DT	6L16

APPENDIX 5: GigaComm Device Order Number and Marking

16 LEAD FCBGA BA SUFFIX CASE 489	
DEVICE	MARKING
NBSG11BA	SG11
NBSG14BA	SG14
NBSG16BA	SG16
NBSG16VSBA	SGS16
NBSG53ABA	SG53A
NBSG86ABA	SG86A
16 LEAD QFN MN SUFFIX CASE 485G	
DEVICE	MARKING
NBSG16MMN	SG16M
49 LEAD FCBGA BA SUFFIX CASE 489A	
DEVICE	MARKING
NBSG111BA	SG111


AND8002/D

For Additional Information

Additional traceability and date code information is available upon request. To make a request, please visit our website at <http://www.onsemi.com> and click on "Technical Support," or contact the Technical Information Center (TIC) at 1-800-282-9855.

AND8002/D

ECLinPS, ECLinPS Lite ECLinPS Plus, ECLinPS MAX, and GigaComm are trademarks of Semiconductor Components Industries, LLC.

ON Semiconductor and  are registered trademarks of Semiconductor Components Industries, LLC (SCILLC). SCILLC reserves the right to make changes without further notice to any products herein. SCILLC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does SCILLC assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in SCILLC data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. SCILLC does not convey any license under its patent rights nor the rights of others. SCILLC products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the SCILLC product could create a situation where personal injury or death may occur. Should Buyer purchase or use SCILLC products for any such unintended or unauthorized application, Buyer shall indemnify and hold SCILLC and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that SCILLC was negligent regarding the design or manufacture of the part. SCILLC is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

PUBLICATION ORDERING INFORMATION

LITERATURE FULFILLMENT:

Literature Distribution Center for ON Semiconductor
P.O. Box 61312, Phoenix, Arizona 85082-1312 USA
Phone: 480-829-7710 or 800-344-3860 Toll Free USA/Canada
Fax: 480-829-7709 or 800-344-3867 Toll Free USA/Canada
Email: orderlit@onsemi.com

N. American Technical Support: 800-282-9855 Toll Free
USA/Canada

Japan: ON Semiconductor, Japan Customer Focus Center
2-9-1 Kamimeguro, Meguro-ku, Tokyo, Japan 153-0051
Phone: 81-3-5773-3850

ON Semiconductor Website: <http://onsemi.com>

Order Literature: <http://www.onsemi.com/litorder>

For additional information, please contact your local Sales Representative.