Intel® Enpirion® Power Solutions

Product Marking

(annex of 11G-00016)

1.0 Purpose and Scope

1.1 The purpose of this annex is to provide instruction on how to generate the top mark codes and marking for Intel Power products

2.0 Top Marking instruction

2.1 Top mark instructions are accesed by suppliers directly via Intel Programmable Solutions Group's Agile system

3.0 Examples of Top mark and generation of "XXXXX" lot number code as well as assembly site code.

4.0 Appendix 1 – Site codes for Assembly and Test

5.0 Site codes and Generation of "XXXXX" code from FPO

6.0 LASOR code

- Is the system of record for all Manufacturing and Product Location Codes at Intel
- Consist of 3 characters
  - First character denotes the stage
    - A=Assembly and preassembly
    - B=Bump
    - F=Fab
    - S=Sort
    - T=Test
  - Second and third are uniquely assigned
- Each site and manufacturing stage has it's own LASOR code

7.0 Enpirion lot number scheme "XXXXX" (keep as secondary in system traceability before WW31)

PBU devices (Package size: above 3x3)

Where "XXXXX" was given to suppliers on EDRO before ww31'18. The "XXXXX" code is to be derived from the 1st, 5th, 6th, 7th and 8th characters of Intel FPO scheme from ww31'18 onwards

PBU devices (Package size : 3x3 and below)

Field	Description
AU	Product code as defined in POD (package outline drawing)
XX	Last 2 digits of - the Enpirion lot number before ww31'18 - The 7th and 8th characters of Intel FPO scheme(Finish Sequential Number) ww31'18 and onwards

Note: where space does not permit for 5 characters, drop the 1st character on the left i.e. "fxaa" (dropped "s")

8.0 Intel FPO scheme – 8 alphanumeric per table 1 below

(Table 1)

s	y	w	w	f	x	a	a
Alphanumeric	Numeric	Numeric	Numeric	Alphanumeric	Alphanumeric	Numeric	Numeric
Finish "Various" code (LASOR)	Last digit of assembly year	Work Week		Finish Site Code	Assembly Site Code	Finish Sequential Number	

Note: workweek is per calendar and increases by 1. Example ww =01 , 02 , 03 , 04, 05 ….50,51 and 52 for Power product devices.

Table 1.1 - The 1st character “S” of the FPO is listed for suppliers below

Supplier Site	S
Unisem	S
Hana	S
ASEM	S
ASEK	S

Table 1.2 – The 5th character of FPO (Finish Site Code) and 6th character of FPO (Assembly site code)

Supplier Site	f	x
Unisem Malaysia	F	U
Hana Thailand	G	H
Lingsen Taiwan	N/A	L
ASE Malaysia	M	J
ASE Taiwan	N/A	K

N/A – Not applicable as no testing done

Appendix 1 Top Mark Layouts and 1st Row Top Mark

Table 1: Reference Table for Top Mark Layouts

Top Mark Layout 1	Top Mark Layout 2	Top Mark Layout 3
Row 1 ZYXX Row 2 XYWW	Row 1 ZYXWVU (up to 6 characters) Row 2 XXXXX Row 3 XYWW	Row 1 ZYXWVUTSR (up to 9 characters) Row 2 XXXXX Row 3 XYWW
Row 1 ZY = Product Code XX = Lot number	Row 1 Product ID (truncated) Row 2 Lot number	Row 1 Product ID (full) Row 2 Lot number
Row 2 X = Assembly Location (Supplier) X = Country of assembly Y = Year of assembly WW = Week of assembly	Row 3 X = Assembly Location (Supplier) X = Country of assembly Y = Year of assembly WW = Week of assembly	Row 3 X = Assembly Location (Supplier) X = Country of assembly Y = Year of assembly WW = Week of assembly
Example AAAU U113	Example N5311 E01BD U019	Example EN5365QI E01AT L122
Product is EP5368QI Lot number is E01AU Assembly in Unisem in Mar 2011 Country of assembly = Malaysia	Product is EN5311QI Lot number is E01BD Assembly in Unisem in May 2010 Country of assembly = Malaysia	Product is EN5365QI Lot number is E01AT Assembly in Lingsen in June 2011 Country of assembly = Taiwan

Top Mark Layout 4	
Row 1	ZYXWVU (up to 6 characters)
Row 2	XYWW
Row 3	XXXXX
Row 1	Product ID (truncated)
Row 2	X = Assembly Location (Supplier) X = Country of assembly Y = Year of assembly WW = Week of assembly
Row 3	Lot number
	Example N5311 U019 E01BD
	Product is EN5311QI Lot number is E01BD Assembly in Unisem in May 2010 Country of assembly = Malaysia

Note:

Table 2 excludes The “Enpirion Name/Logo” or “Intel Name/Logo” that can be included in the top marks of some product IDs .

It only shows a few example. Refer to specification drawing for exact requirement

OPN	1st Row Top Mark	Top Mark Layout
ER6230QI	R6230	2
ED8106N01QI	81061	Exception 1
ER2120QI	R2120	2
ER3105DI	3105	2
ES1010SI	S1010	2
ES1021QI	S1021	2
ES1030QI	S1030	Exception 3
EY1601SA-ADJ	Y1601A	Exception 4
EY1602SI-ADJ	Y1602A	Exception 5
EC7100VQI	7100	2
EC7401QI	EC7401	2

EC2630QI	2630	2
EN5335QI	EN5335QI	3
EN5336QI	EN5336QI	3
EN6310QA	6310A	2
EN6310QI	N6310	2
EN6361QI	EN6361QI	3
EN6362QI	EN6362QI	3
EN6382QI	EN6382QI	3
EP5348UI	ATXX	1
EP5357HUI	AHXX	1
EP5357LUI	AEXX	1
EP5358HUA	BNXX	1
EP5358HUI	ANXX	1
EP5358LUA	BKXX	1
EP5358LUI	AKXX	1
EP5368QI	AAXX	1
EP5388QI	ABXX	1
EP53A7HQI	AGXX	1
EP53A7LQI	ADXX	1
EP53A8HQA	BMXX	1
EP53A8HQI	AMXX	1
EP53A8LQA	BJXX	1
EP53A8LQI	AJXX	1
EP53F8QI	APXX	1
EN6340QI	EN6340QI	3
EN6363QI	EN6363QI	3
EV1320QI	AUXX	1
EN2340QI	EN2340QI	3
EN2342QI	EN2342QI	3
EN2360QI	EN2360QI	3
EN2390QI	EN2390QI	3
EN2392QI	EN2392QI	3
EN23F0QI	EN23F0QI	3
EN23F2QI	EN23F2QI	3
EN5311QI	N5311	2
EN5312QI	N5312	2
EN5319QI	EN5319	2
EN5322QI	EN5322	2
EN5329QI	EN5329	2
EN5337QI	EN5337	2

EN5339QI	EN5339	2
EN5364QI	EN5364QI	3
EN5365QI	EN5365QI	3
EN5366QI	EN5366QI	3
EN5367QI	EN5367QI	3
EN5394QI	EN5394QI	3
EN5395QI	EN5395QI	3
EN5396QI	EN5396QI	3
EN6337QA	N6337A	2
EN6337QI	EN6337	2
EN6347QA	N6347A	2
EN6347QI	EN6347	2
EN6360QA	EN6360QA	3
EN6360QI	EN6360QI	3
EN63A0QA	EN63A0QA	3
EN63A0QI	EN63A0QI	3
EP5352QI	P5352	2
EP5362QI	P5362	2
EP5382QI	P5382	2
EQC1240QI	1240	2
EQC1241QI	1241	2
EV1340QI	EV1340QI	3
EV1380QI	EV1380QI	3
EX3AV	EX3AV	3
EZ6301QI	EZ6301QI	3
EN29A0QI	EN29A0QI	3
EZ6303QI	EZ6303QI	3
EN6338QI	6338	2
ED8102QI	D8102	4
ED8201QI	D8201	4
ED8104QI	D8104	4
EC2650QI	C2650	2
ED8401P01QI	84011	2
ED8401P03QI	84013	2
ED8401P05QI	84015	2
ET2760ALI	2760A	2
ET6160LI	T6160	2
ED88042S01QI	88041	Exception 2
EM2130L01QI	M2130L	2
EM2040N01QI	M2040N	2

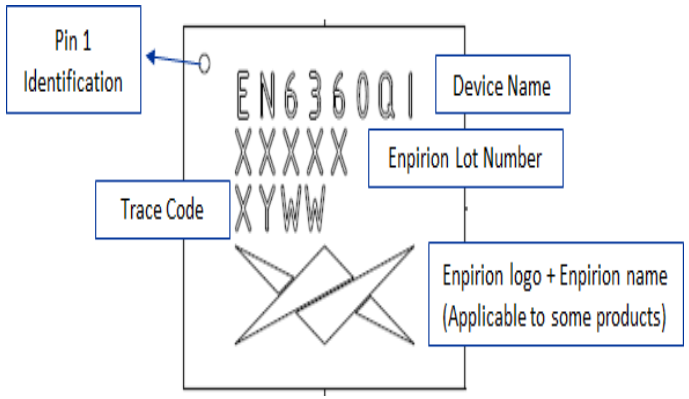
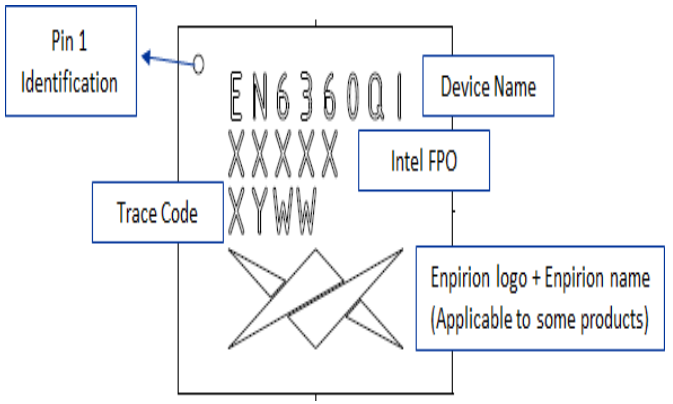
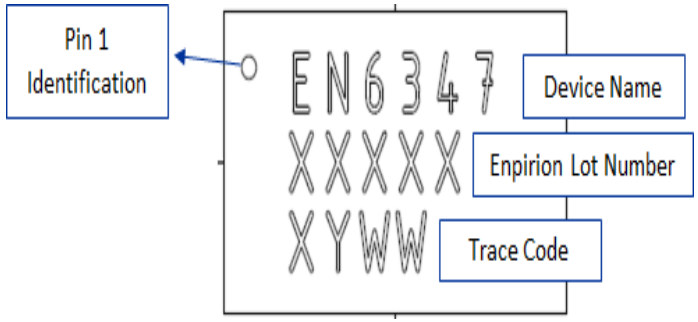
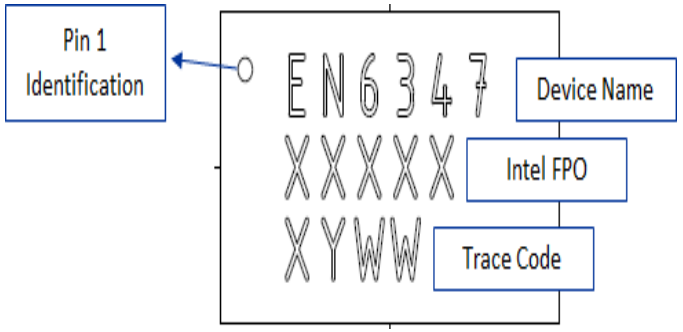
EM2120H01QI	M2120H	2
EM2120L01QI	M2120L	2
EM2130H01QI	M2130H	2
EM2130L02QI	M2130L2	2
EM2140P01QI	M2140P	2
EM2260P01QI	M2260P	2
EM2280P01QI	M2280P	2
EM2030L01QI	M2030L	2
EM2121L01QI	M2121L	2
EM2121H01QI	M2121H	2

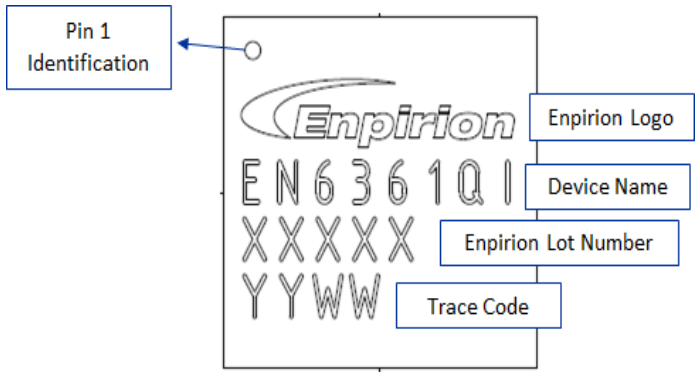
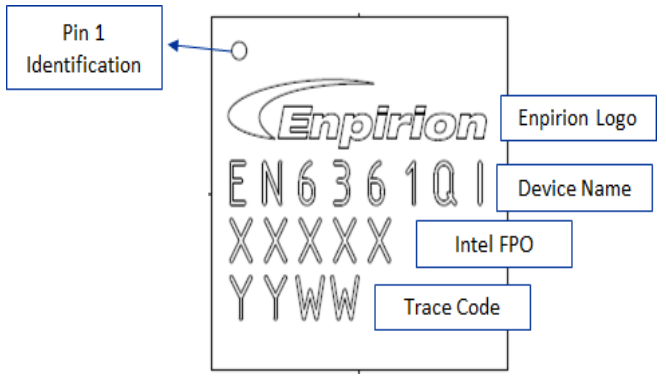
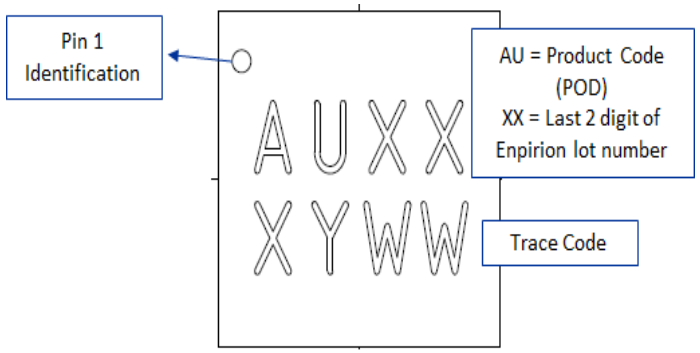
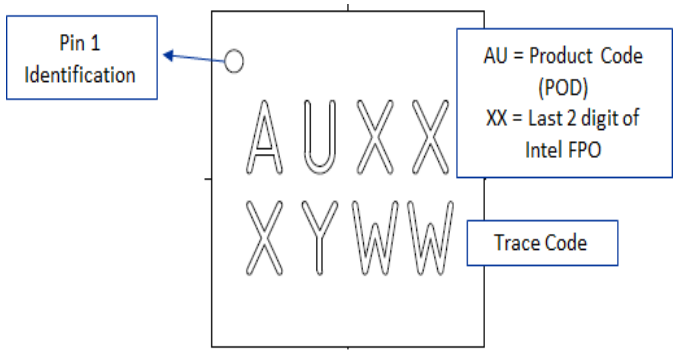
Appendix 2 – Power Products Business Unit (PPBU) Topmark Scheme

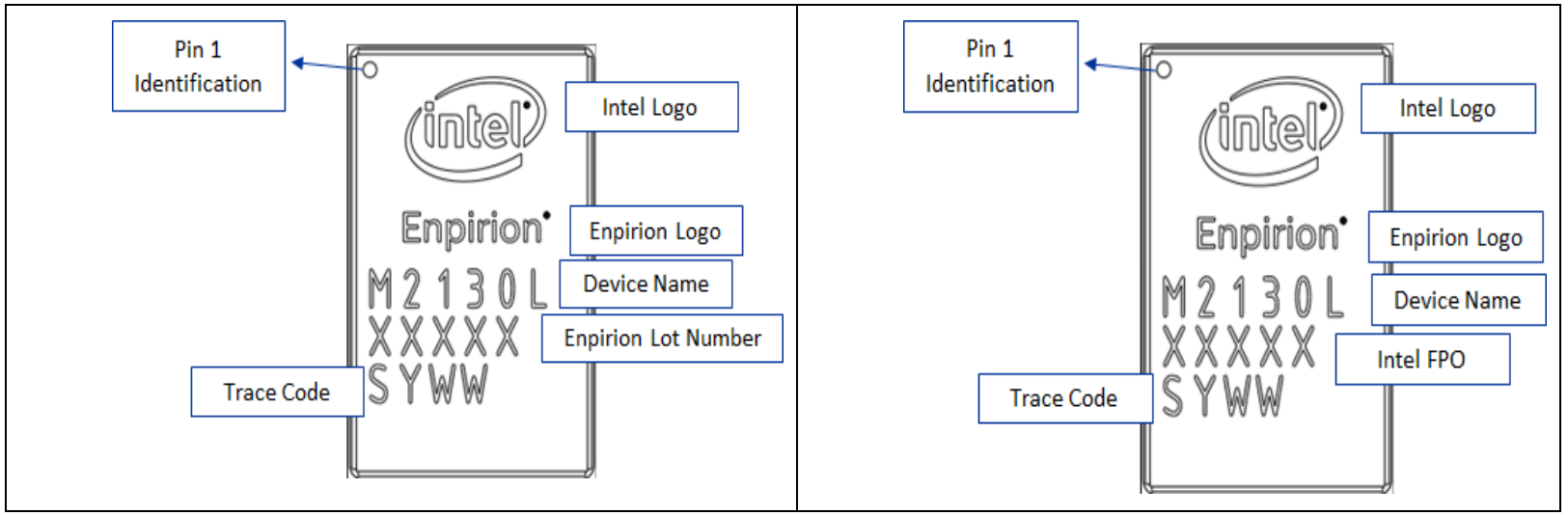
1. **Refer to the marking requirements as defined in Agile Package Outline.**
2. **The different marking format used as shown below is mainly determine by the size of the package. The top mark information as a mimumum will consists:**
    a) **Device name (full or part) or Product Code**
    b) **Lot number (Intel FPO)**
    c) **Trace code (XYWW / SYWW / YYWW)**

Note: the 1st character of the Trace code is derived from table 1.2 – the Assembly site code.

Different characters X/S/Y used because of the legacy marking instructions.

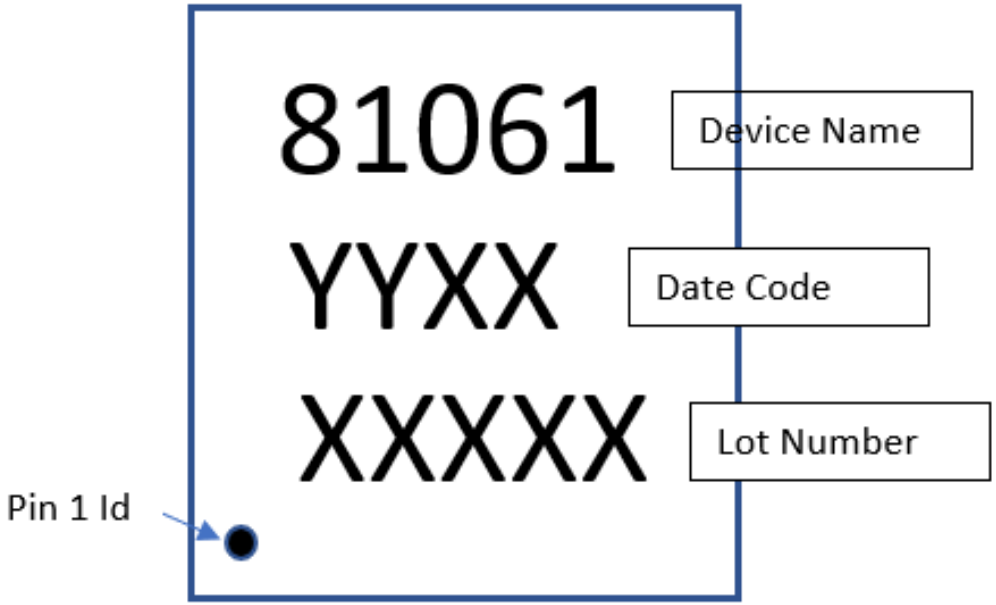
Before WW31'18	After WW31'18
	
	

Before WW31'18	After WW31'18
	
	


Pin 1 Identification
Intel Logo
Enpirion
Enpirion Logo
M2130L
Device Name
XXXXX
Enpirion Lot Number
Trace Code
SYWW
Pin 1 Identification
Intel Logo
Enpirion
Enpirion Logo
M2130L
Device Name
XXXXX
Intel FPO
Trace Code
SYWW

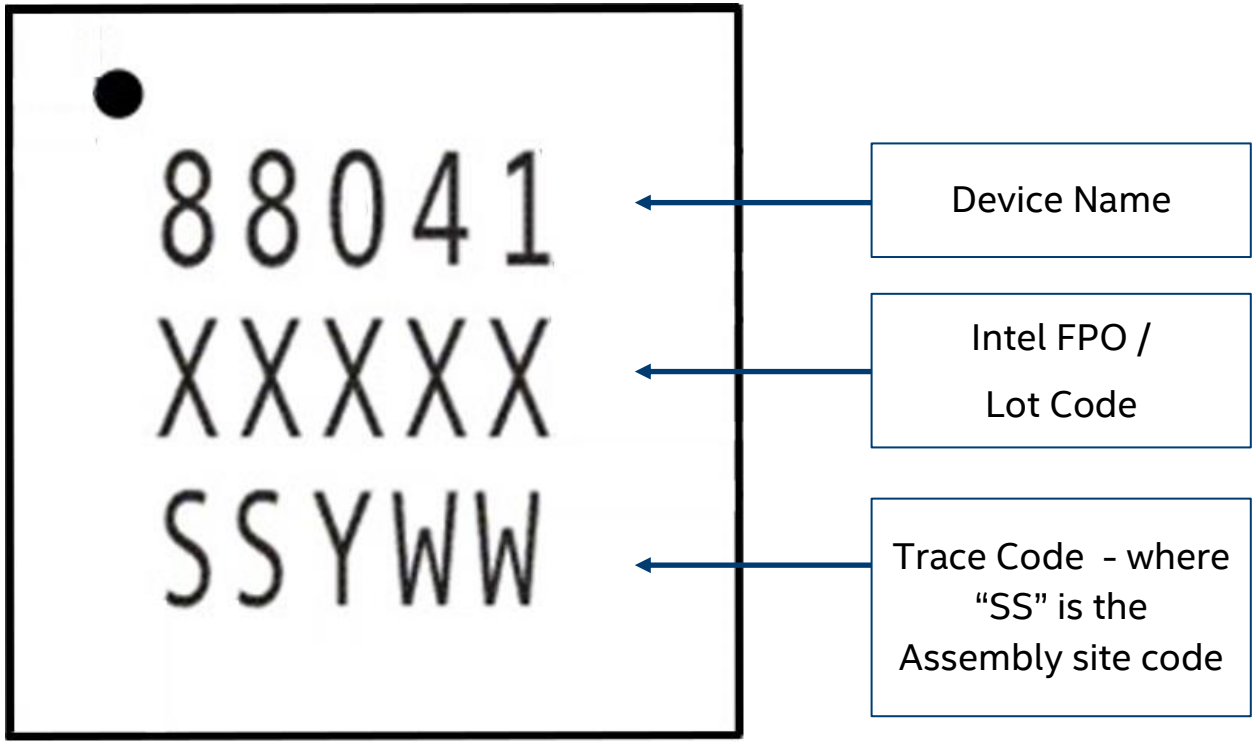
Exception 1:

Applicable to Device Name: ED8106N01QI



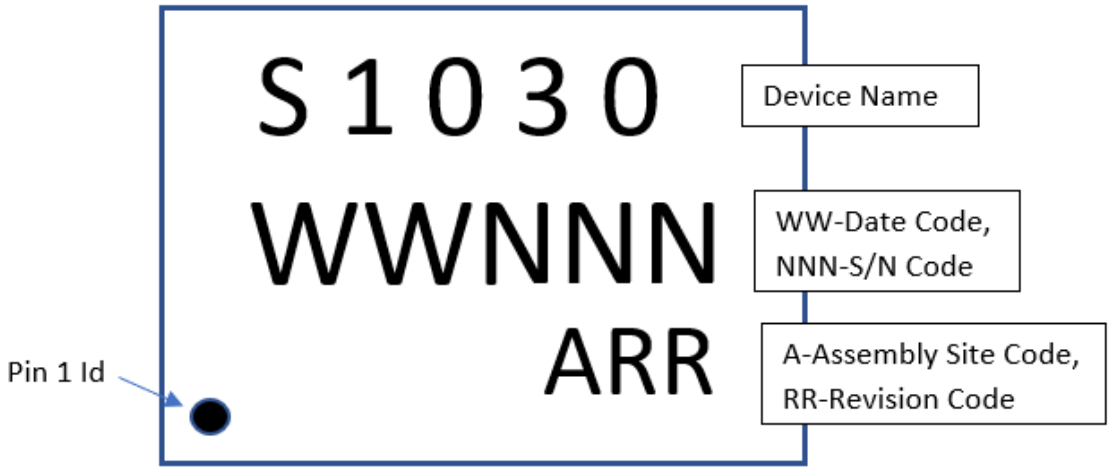
Exception 2:

Applicable to Device name : ED88042S01QI



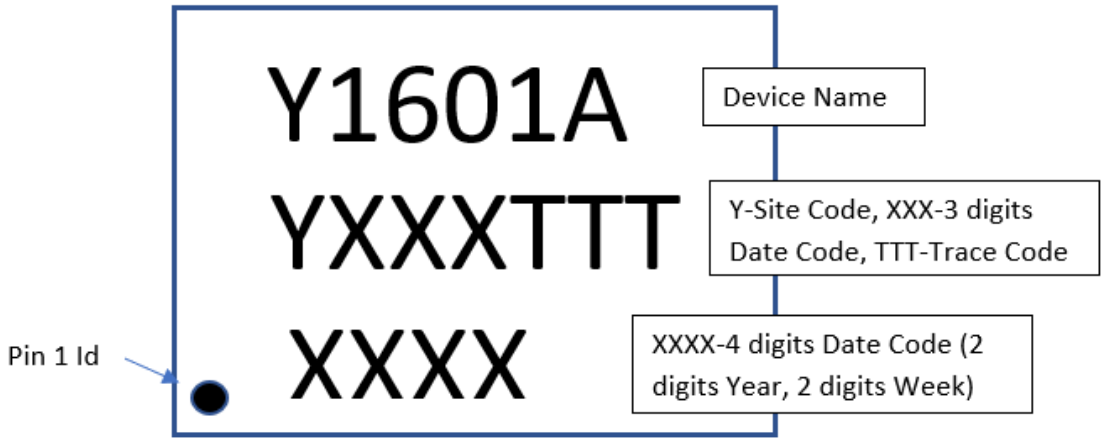
Exception: 3

Applicable to ES1030QI



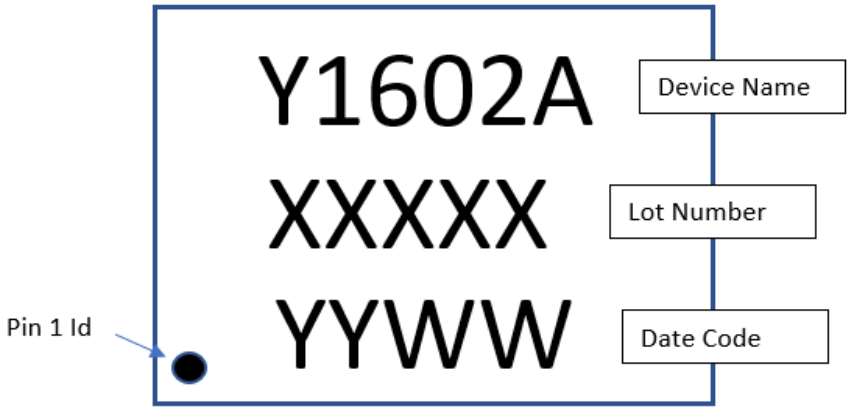
Exception: 4

Applicable to EY1601SA-ADJ



Exception: 5

Applicable to EY1602SI-ADJ



Revision History

Revision Number	Description	By	Revision Date
00	Initial release. Reference: 11G-00016	Hock Huat Tan	03 July 2018
01	Amended Section 7.0 and 8.0. Section 9.0 Table 1.1 add in ASEM as Test house/Supplier Site	Sam Thong Cheah	27 July 2018
02	Add to Appendix 2. Exception to PPBU Top Mark Scheme Add to table 1.1 – ASEK (ASE Taiwan) Remove COO/COA from App 2.2	Sam Thong Cheah	15 May 2018
03	Add to Appendix 2. Exception 2 to PPBU Top Mark Scheme.	Sam Thong Cheah	23 Oct 2019
04	Appendix 1. Heading add "and 1st Row Top Mark". Add in "Top Mark Layout 4" and table showing "1st Row Marking and "Top Mark Layout". Appendix 2 under Exception 1. Remove ED8102QI,ED8104QI,ED8201QI,ED8103QI and this now covered under Layout 4. Exception 1 to 5 covers 3rd party(buy/sell) products.	Sam Thong Cheah	13 Oct 2020
05	Appendix 1. Correct Typo error for 1st row marking on EM2130L01QI	Sam Thong Cheah	7 Jan 2021