

# Product / Process Change Notification



N° 2020-02

Date: June 16<sup>th</sup>, 2020

**Subject: *New assembly line for products assembled in TO-240 package***

**Dear Customer,**

Please find enclosed all details related to our IXYS/Littelfuse PCN.

Important information for your attention and according to JEDEC STANDARD "JESD46":

- Please respond to this PCN by indicating your decision on the approval form, sign it and return to your Sales partner before 31/07/2020.
- If we do not receive any response by the due date in the PCN above we consider this as the acceptance of the PCN. After the last order date as stated herein, purchase orders related to the unchanged product(s) cannot be accepted.

Your prompt reply will help IXYS/Littelfuse Technology to assure a smooth and well executed transition.




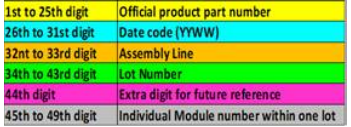


Your attention and response to this matter is greatly appreciated.

Contact Information:	Contact your local Ixys/Littelfuse Sales Partner
PCN Samples demand:	Contact your local Ixys/Littelfuse Sales Partner.  Sample requests are to be submitted no later than 30 days from the date of the PCN.  Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.

# Product / Process Change Notification



N° 2020-02

<b>SUBJECT OF CHANGE:</b>	Introduction of new Ixys/Littelfuse assembly line for TO-240 package in Lipa, Philippines	
<b>PRODUCTS AFFECTED:</b>	See page 5 to 7	
<b>REASON OF CHANGE:</b>	Increase of production capabilities	
<b>DESCRIPTION OF CHANGE:</b>	<b>ACTUAL SITE</b>	<b>NEW SITE</b>
<ul style="list-style-type: none"> <li>■ Marking (on parts)</li> </ul>		
<ul style="list-style-type: none"> <li>• Company Logo</li> </ul>	Ixys Logo 	Ixys Littelfuse Logo 
<ul style="list-style-type: none"> <li>• UL Logo</li> </ul>	NO CHANGE	
<ul style="list-style-type: none"> <li>• Electrical Draw. + pin out</li> </ul>	NO CHANGE	
<ul style="list-style-type: none"> <li>• Date code + Assy code</li> </ul>	NO CHANGE	
<ul style="list-style-type: none"> <li>• Catalog Part Number</li> </ul>	NO CHANGE	
<ul style="list-style-type: none"> <li>• Lot Number</li> </ul>	6 digit = xxxxxx Lot sequential number (000001 – 999999)	8 digit = YYMDDxxx YY= 2 last digit of the year, M = Month (A=Jan, L=Dec), DD = Day, xxx = Lot sequential (001-999) reset to 001 every day
<ul style="list-style-type: none"> <li>• 2D Matrix</li> </ul>	36 characters 	49 characters 
<ul style="list-style-type: none"> <li>■ Labelling (on packing)</li> </ul>		
<ul style="list-style-type: none"> <li>• Box</li> </ul>		
<ul style="list-style-type: none"> <li>• 2D Sequence</li> </ul>	Product Code - Type - Date Code - Lot No. - Qty – Label ID	Product Code – Type – Date Code – Lot No. + Sequential Box Number - Qty
<ul style="list-style-type: none"> <li>■ Bill of material</li> </ul>	NO CHANGE	
<ul style="list-style-type: none"> <li>■ Electrical characteristics</li> </ul>	Electrical characteristics of qualification site matched to current production site	
<ul style="list-style-type: none"> <li>■ Mechanical characteristics</li> </ul>	Mechanical characteristics of qualification site matched to current production site	

# Product / Process Change Notification



N° 2020-02

## RELIABILITY DATA SUMMARY:

- Modules qualification done on MCC56-18io1B and MCC95-18io1B
- All tests were passed, no failure occurred during or after testing
- These modules are structurally similar to the TO-240 module package family
- The acceptance defining criteria for type tests of this product family are detailed in:  
IEC 60747-6 Edition 3.0, clause 7.5.5, table 10

Results:	Test	Description	Conditions	Standard Use	# Lots	Qty/Lot	Result
MC56-18io1B							
1	HTRB	High Temp. Rev. Bias	1000hr., 125°C, 1260 V AC	IEC 60749-23	3	10	Passed
2	T/C	Temperature Cycling	100 cycles, -40°C/+150°C	IEC 60749-25	3	10	Passed
3	Humidity	High Temperature High Humidity Bias	1000hr., 85% r.H., 85°C	IEC 70749-42	3	10	Passed
4	P/C	Power Cycling	20000 cycles, IT <sub>AV</sub> =49 A, IT <sub>RMS</sub> =85 A, T <sub>J</sub> =125°C, dT=80K	IEC 60749-34	3	10	Passed
MCC95-18io1B							
1	HTRB	High Temp. Rev. Bias	1000hr., 125°C, 1260 V AC	IEC 60749-23	3	10	Passed
2	T/C	Temperature Cycling	100 cycles, -40°C/+150°C	IEC 60749-25	3	10	Passed
3	Humidity	High Temperature High Humidity Bias	1000hr., 85% r.H., 85°C	IEC 70749-42	3	10	Passed
4	P/C	Power Cycling	20000 cycles, IT <sub>AV</sub> =49 A, IT <sub>RMS</sub> =85 A, T <sub>J</sub> =125°C, dT=80K	IEC 60749-34	3	10	Passed

# Product / Process Change Notification



N° 2020-02

## TIME SCHEDULE:

- |  |   |
|--|---|
| ■ Targeted parts availability:             | Group #1: June 2020<br>Group #2: August 2020<br>Group #3: September 2020<br>Group #4: October 2020<br>Group #5: November 2020 |
| ■ Last order date of unchanged product:    | n/a   |
| ■ Last delivery date of unchanged product: | n/a   |

## ASSESSMENT:

- No influence in terms fit, form and function.
- No part number change.
- Data sheets remain unchanged.

# Product / Process Change Notification



N° 2020-02

## LIST OF AFFECTED TO-240 PARTS:

### ■ Group#1 parts

1	MCC56-08IO1B	11	MCC72-08IO1B	21	MCC95-08IO1B	31	MCMA85P1200TA
2	MCC56-08IO8B	12	MCC72-08IO8B	22	MCC95-08IO8B	32	MCMA85P1600TA
3	MCC56-12IO1B	13	MCC72-12IO1B	23	MCC95-12IO1B	33	MCMA85P1800TA
4	MCC56-12IO8B	14	MCC72-12IO8B	24	MCC95-12IO8B		
5	MCC56-14IO1B	15	MCC72-14IO1B	25	MCC95-14IO1B		
6	MCC56-14IO8B	16	MCC72-14IO8B	26	MCC95-14IO8B		
7	MCC56-16IO1B	17	MCC72-16IO1B	27	MCC95-16IO1B		
8	MCC56-16IO8B	18	MCC72-16IO8B	28	MCC95-16IO8B		
9	MCC56-18IO1B	19	MCC72-18IO1B	29	MCC95-18IO1B		
10	MCC56-18IO8B	20	MCC72-18IO8B	30	MCC95-18IO8B		

## LIST OF AFFECTED TO-240 PARTS:

### ■ Group#2 parts

1	MCC19-08IO1B	22	MCC44-12IO1B	43	MCC94-24IO1B	64	MCD44-18IO8B
2	MCC19-08IO8B	23	MCC44-12IO8B	44	MCNA40P2200TA	65	MCMA25PD1200TB
3	MCC19-12IO1B	24	MCC44-14IO1B	45	MCNA55P2200TA	66	MCMA25PD1600TB
4	MCC19-12IO8B	25	MCC44-14IO8B	46	MCNA75P2200TA	67	MCMA35PD1200TB
5	MCC19-14IO1B	26	MCC44-16IO1B	47	MCNA95P2200TA	68	MCMA35PD1600TB
6	MCC19-14IO8B	27	MCC44-16IO8B	48	MCD26-08IO1B	69	MCMA50PD1200TB
7	MCC19-16IO1B	28	MCC44-18IO1B	49	MCD26-08IO8B	70	MCMA50PD1600TB
8	MCC19-16IO8B	29	MCC44-18IO8B	50	MCD26-12IO1B	71	MCMA65PD1200TB
9	MCC21-08IO8B	30	MCMA25P1200TA	51	MCD26-12IO8B	72	MCMA65PD1600TB
10	MCC21-12IO8B	31	MCMA25P1600TA	52	MCD26-14IO1B	73	MCMA110PD1200TB
11	MCC21-14IO8B	32	MCMA35P1200TA	53	MCD26-14IO8B	74	MCMA110PD1600TB
12	MCC21-16IO8B	33	MCMA35P1600TA	54	MCD26-16IO1B	75	MCD94-20IO1B
13	MCC26-08IO1B	34	MCMA50P1200TA	55	MCD26-16IO8B	76	MCD94-22IO1B
14	MCC26-08IO8B	35	MCMA50P1600TA	56	MCD44-08IO1B	77	MCNA40PD2200TB
15	MCC26-12IO1B	36	MCMA65P1200TA	57	MCD44-08IO8B	78	MCNA55PD2200TB
16	MCC26-12IO8B	37	MCMA65P1600TA	58	MCD44-12IO1B	79	MCNA75PD2200TB
17	MCC26-14IO1B	38	MCMA65P1800TA	59	MCD44-12IO8B	80	MCNA95PD2200TB
18	MCC26-14IO8B	39	MCMA110P1200TA	60	MCD44-14IO1B	81	MCNA120PD2200TB
19	MCC26-16IO1B	40	MCMA110P1600TA	61	MCD44-14IO8B	82	MCMA140P1200TA
20	MCC26-16IO8B	41	MCMA110P1800TA	62	MCD44-16IO1B	83	MCMA140P1400TA
21	MCC44-08IO1B	42	MCC94-20IO1B	63	MCD44-16IO8B	84	MCMA140P1600TA
22	MCC44-08IO8B	43	MCC94-22IO1B	64	MCD44-18IO1B	85	MCMA140P1800TA

# Product / Process Change Notification



N° 2020-02

## LIST OF AFFECTED TO-240 PARTS:

### ■ Group#3 parts

1	MCD56-08IO1B	21	MCD95-08IO1B	41	MDD95-12N1B	61	MDD56-12N1B
2	MCD56-08IO8B	22	MCD95-08IO8B	42	MDD95-14N1B	62	MDD56-14N1B
3	MCD56-12IO1B	23	MCD95-12IO1B	43	MDD95-16N1B	63	MDD56-16N1B
4	MCD56-12IO8B	24	MCD95-12IO8B	44	MDD95-18N1B	64	MDD56-18N1B
5	MCD56-14IO1B	25	MCD95-14IO1B	45	MDD95-20N1B	65	MDMA35P1200TG
6	MCD56-14IO8B	26	MCD95-14IO8B	46	MDD95-22N1B	65	MDMA35P1600TG
7	MCD56-16IO1B	27	MCD95-16IO1B	47	MDMA140P1200TG	67	MDMA50P1200TG
8	MCD56-16IO8B	28	MCD95-16IO8B	48	MDMA140P1600TG	68	MDMA50P1600TG
9	MCD56-18IO1B	29	MCD95-18IO1B	49	MDMA140P1800TG	69	MDMA65P1200TG
10	MCD56-18IO8B	30	MCD95-18IO8B	50	MDD26-08N1B	70	MDMA65P1600TG
11	MCD72-08IO1B	31	MCMA85PD1200TB	51	MDD26-12N1B	71	MDMA85P1200TG
12	MCD72-08IO8B	32	MCMA85PD1600TB	52	MDD26-14N1B	72	MDMA85P1600TG
13	MCD72-12IO1B	33	MCMA140PD1200TB	53	MDD26-16N1B	73	MDMA110P1200TG
14	MCD72-12IO8B	34	MCMA140PD1600TB	54	MDD26-18N1B	74	MDMA110P1600TG
15	MCD72-14IO1B	35	MDD72-08N1B	55	MDD44-08N1B		
16	MCD72-14IO8B	36	MDD72-12N1B	56	MDD44-12N1B		
17	MCD72-16IO1B	37	MDD72-14N1B	57	MDD44-14N1B		
18	MCD72-16IO8B	38	MDD72-16N1B	58	MDD44-16N1B		
19	MCD72-18IO1B	39	MDD72-18N1B	59	MDD44-18N1B		
20	MCD72-18IO8B	40	MDD95-08N1B	60	MDD56-08N1B		

## LIST OF AFFECTED TO-240 PARTS:

### ■ Group#4 parts

1	MCC56-14IO1
2	MCC95-14IO1
3	MCC95-16IO1
4	MCD95-16IO1
5	MCMA140PD1600TB-NI
6	MCNA120PD2200TB-NI
7	MDA72-08N1B
8	MDA72-16N1B
9	MDA95-22N1B

# Product / Process Change Notification



N° 2020-02

## LIST OF AFFECTED TO-240 PARTS:

### ■ Group#5 parts

1	MEA75-12DA
2	MEE75-12DA
3	MEK75-12DA
4	MEA95-06DA
5	MEE95-06DA
6	MEK95-06DA
7	MEK150-04DA
8	MPK95-06DA
9	VMK165-007T
10	VMK90-02T1
11	VMM45-02F
12	VMM45-02FS
13	VMO60-05F
14	MEA75-12DA
15	MEE75-12DA
16	MEK75-12DA

Customer information:

Forward-looking statements are intended to provide information about our expected future operations. These statements are not promises or guarantees, particularly with respect to any timelines provided in the schedule. All terms of delivery and rights to technical changes are subject to alteration by IXYS/Littelfuse Technology.