Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **TB1311-01** DATE **April 9, 2014**
Product Affected: **VFQFPN-28, VFQFPN-40, VFQFPN-48 shipped in Tape & Reel**
(Refer to Attachment II for affected part#)
Date Effective: **July 9, 2014**

MEANS OF DISTINGUISHING CHANGED DEVICES:
☐ Product Mark
☐ Back Mark
☐ Date Code
■ Other

Shipment starting from July 9, 2014.

Contact: IDT PCN DESK
E-mail: pcndesk@idt.com

Attachment: ■ Yes ☐ No
Samples: N/A

DESCRIPTION AND PURPOSE OF CHANGE:

☐ Die Technology
☐ Wafer Fabrication Process
☐ Assembly Process
☐ Equipment
☐ Material
☐ Testing
☐ Manufacturing Site
☐ Data Sheet
■ Other - Packaging

This notification is to advise our customers that IDT has qualified a new revision of carrier tape.

The new carrier tape has changes in pocket design and dimensions however quantity per reel remains unchanged.

Attachment I - Additional information on new carrier tape
Attachment II - Affected part list
Attachment III - Existing and New Carrier Tape Drawings

RELIABILITY/QUALIFICATION SUMMARY:

New carrier tape passed IDT internal qualification requirements and complies with EIA-481-D standard.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.
IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____ ☐ ***Approval for shipments prior to effective date.***

Name/Date: _____ E-Mail Address: _____

Title: _____ Phone# /Fax# : _____

CUSTOMER COMMENTS: _____

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____ DATE: _____

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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN #: TB1311-01

PCN Type: Packaging

Data Sheet Change: None

Detail of Change: This notification is to advise our customers that IDT has qualified a new revision of carrier tape for package VFQFPN-28, VFQFPN-40 and VFQFPN-48.

The new carrier tape has changes in pocket design and dimensions however quantity per reel remains unchanged.

The new carrier tape complies with the requirement of EIA-481-D standard.

The new carrier tape passed the IDT internal qualification requirements. Refer to Table 1 for the qualification results.

Refer to to Table 2, Figure 1 and 2 for the comparison of the existing and new carrier tape in terms of carrier tape pocket dimensions and pocket designs respectively.

Qualification Test Plan and Result:

Table 1: IDT Internal Qualification Results

Description	Reject/Sample Size	Result
Peel Strength Test	0/5 strips	Pass
Visual/Mechanical	0/5 pockets	Pass
Surface Resistivity Test	0/5 pockets	Pass
Drop Test, 6 ft	0/1 reel	Pass
Dimensional	0/5 pockets	Pass

ATTACHMENT I - PCN #: TB1311-01

Table 2: Comparison of Existing Carrier Tape and New Carrier Tape

Description	Existing Carrier Tape	Existing Carrier Tape	New Carrier Tape
Product Group	Group A[1]	Group B[2]	Group A & Group B
IDT Carrier Tape Part#	P8-364-N40	P8-230-N40	P8-448-000
IDT Carrier Tape Drawing#	MSC-5902	MSC-3454	MSC-7371
Supplier Carrier Tape Part#	QFN6X6GP-22B3-360C-SD	NL40-22B3-128C-SD	QFN6X6P8GP-20B3-360C-SD
Supplier	PCT	PCT	PCT
Pocket Width, Ao (mm)	6.3 ± 0.1	6.4 ± 0.1	6.3 ± 0.1
Pocket Length, Bo (mm)	6.3 ± 0.1	6.4 ± 0.1	6.3 ± 0.1
Pocket Depth, Ki (mm)	N/A	1.2 ± 0.1	N/A
Pocket Pitch, P1 (mm)	12.0 ± 0.1	8.0 ± 0.1	8.0 ± 0.1
Total Pocket Depth, Ko (mm)	1.1 ± 0.1	1.5 ± 0.1	1.1 ± 0.1
Carrier Tape Width, W (mm)	16.0 ± 0.3	16.0 ± 0.3	16.0 ± 0.3
Carrier Tape Thickness, T (mm)	0.30 ± 0.05	0.30 ± 0.05	0.30 ± 0.05

Notes:

1. Group A - VFQFPN-48 from ICS market segment (except 9UMS9633B)

- VFQFPN-40 from ICS market segment (except 95V2F857A, 95V857A, 95VLP857A, 97U877A, 98ULPA877A)

2. Group B - VFQFPN-48 from IDT market segment

- VFQFPN-48, 9UMS9633B

- VFQFPN-40 from IDT market segment

- VFQFPN-40, 95V2F857A, 95V857A, 95VLP857A, 97U877A, 98ULPA877A

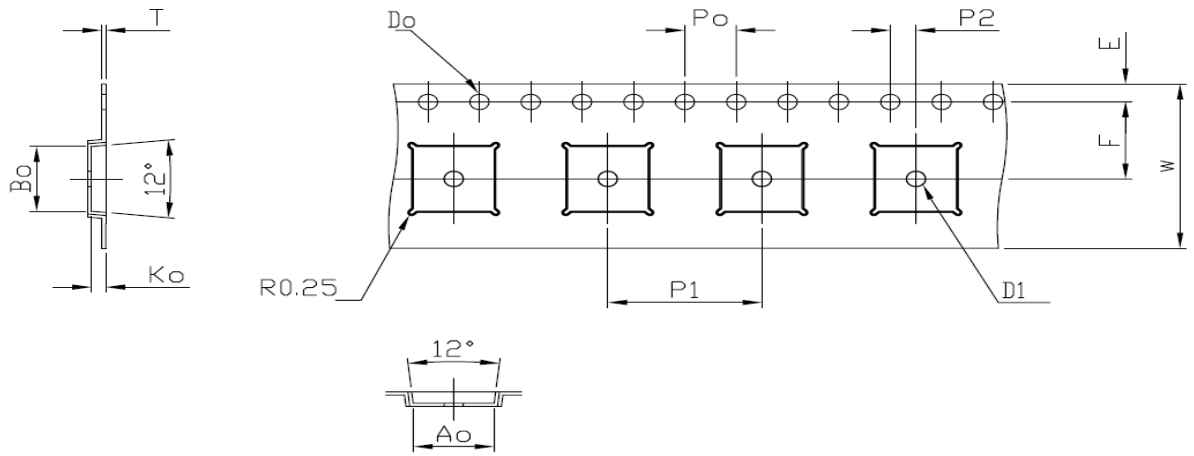
- VFQFPN-28 from IDT market segment

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN #: TB1311-01

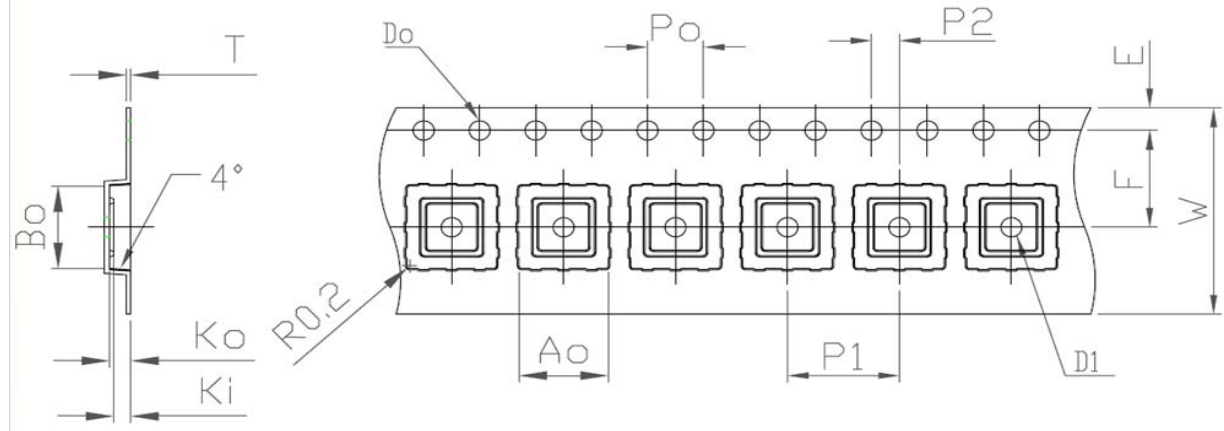
Figure1: Illustration of Existing Carrier Tape Pocket and New Carrier Tape Pocket

Existing Carrier Tape (P8-364-N40) - Pocket Dimensions



Ao ±0.1	Bo ±0.1	Ko ±0.1	Ki ±0.1	E ±0.1	F ±0.05	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.3	6.3	1.1	NA	1.75	7.5	4.0	12.0	2.0	ø1.5	ø1.5	0.30	16.0

Existing Carrier Tape (P8-230-N40) - Pocket Dimensions



Ao ±0.1	Bo ±0.1	Ko ±0.1	Ki ±0.1	E ±0.1	F ±0.1	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.4	6.4	1.5	1.2	1.75	7.5	4.0	8.0	2.0	ø1.5	ø1.5	0.30	16.0

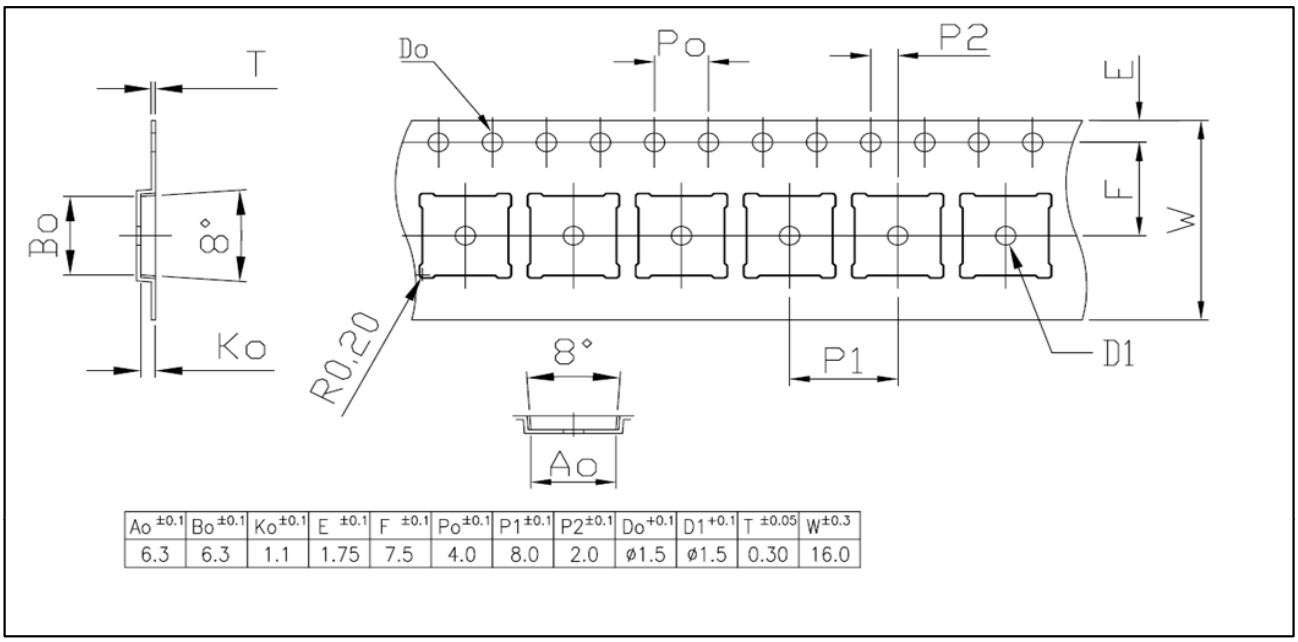
**Note: All dimensions are in mm. Refer to the attached carrier tape drawings for more details.*

PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN #: TB1311-01

Figure1: Illustration of Existing Carrier Tape Pocket and New Carrier Tape Pocket

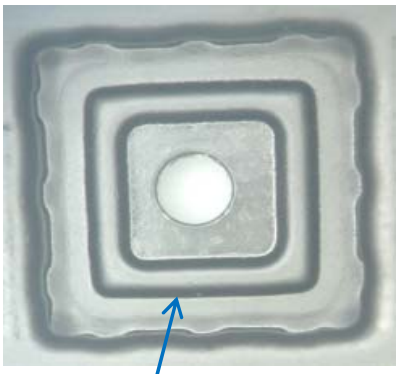
New Carrier Tape (P8-448-000) - Pocket Dimensions



Ao ±0.1	Bo ±0.1	Ko ±0.1	E ±0.1	F ±0.1	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.3	6.3	1.1	1.75	7.5	4.0	8.0	2.0	ø1.5	ø1.5	0.30	16.0

**Note: All dimensions are in mm. Refer to the attached carrier tape drawings for more details.*

Figure2: Illustration of Existing Carrier Tape Pocket Design and New Carrier Tape Pocket Design

Existing Carrier Tape (P8-364-N40)	Existing Carrier Tape (P8-230-N40)	New Carrier Tape (P8-448-000)
		
Without Pedestal	With Pedestal	Without Pedestal

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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT II - PCN #: TB1311-01

Affected Part Numbers (Group A)

Part Number	Part Number	Part Number	Part Number
932SL901AKLFT	9UM702BKLFT	849N202CKI-001LFT	849N212CKI-007LFT
932SQ428AKLFT	9UMS9610BKLFT	849N202CKI-002LFT	849N212CKI-008LFT
932SQ428AKLFT-INT	9UMS9610CKLFT	849N202CKI-005LFT	849N212CKI-010LFT
932SQ430AKLFT	9VRS4338DKILFT	849N202CKI-006LFT	849N212CKI-999LFT
932SV901AKLFT	9VRS4338DKLFT	849N202CKI-007LFT	849N212CKILFT
9CPS4595AKLFT	9VRS4338DKLFT-INT	849N202CKI-008LFT	8714004DKILFT
9DBV0631AKILFT	9VRS4420BKLFT	849N202CKI-009LFT	8743004DKILFT
9DBV0631AKLFT	9VRS4420BKLFT-IN0	849N202CKI-010LFT	97U870AKLFT
9DBV0831AKILFT	9VRS4420DKLFT	849N202CKI-011LFT	97ULP877BKLF/W
9DBV0831AKLFT	9VRS4420DKLFT-INT	849N202CKI-012LFT	97ULP877BKLFT
9DBV0841AKILFT	9VRS4450AKLFT	849N202CKI-013LFT	97ULP877BKLFT/M
9DBV0841AKLFT	9VRS4450AKLFT-INT	849N202CKI-014LFT	98UAE877AKLFT
9DBV0841AKLFT-INT	9ZXL0831AKLFT	849N202CKI-015LFT	9DBV0630AKILFT
9EMS9633BKILFT	9ZXL0851AKLFT	849N202CKI-016LFT	9DBV0630AKLFT
9EMS9633BKILFT-EMR	1894K-40LFT	849N202CKI-017LFT	9DBV0830AKILFT
9EMS9633BKLFT	1894K-43LFT	849N202CKI-018LFT	9DBV0830AKLFT
9FG832AKILFT	1894KI-40LFT	849N202CKI-019LFT	9FGP202AKLFT
9FG832AKLFT	1894KI-43LFT	849N202CKI-020LFT	9FGP202AKLFT-INT
9FGL839AKILFT	813N2560CKLFT	849N202CKI-021LFT	9FGP202AKLFT-SUN
9FGL839AKLFT	840N202CKI-000LFT	849N202CKI-022LFT	9FGP204BKLFT
9FGV0831CKILFT	840N202CKI-001LFT	849N202CKI-023LFT	9FGP204BKLFT-INT
9FGV0831CKLFT	840N202CKI-999LFT	849N202CKI-999LFT	9FGP205AKLFT
9FGV0841AKILFT	840N202CKILFT	849N202CKILFT	9LRS4116AKLFT
9FGV0841AKLFT	843N571AKILFT	849N212CKI-004LFT	
9LPRS436CKILFT	843N571BKILFT	849N212CKI-005LFT	
9LPRS436CKLFT	849N202CKI-000LFT	849N212CKI-006LFT	

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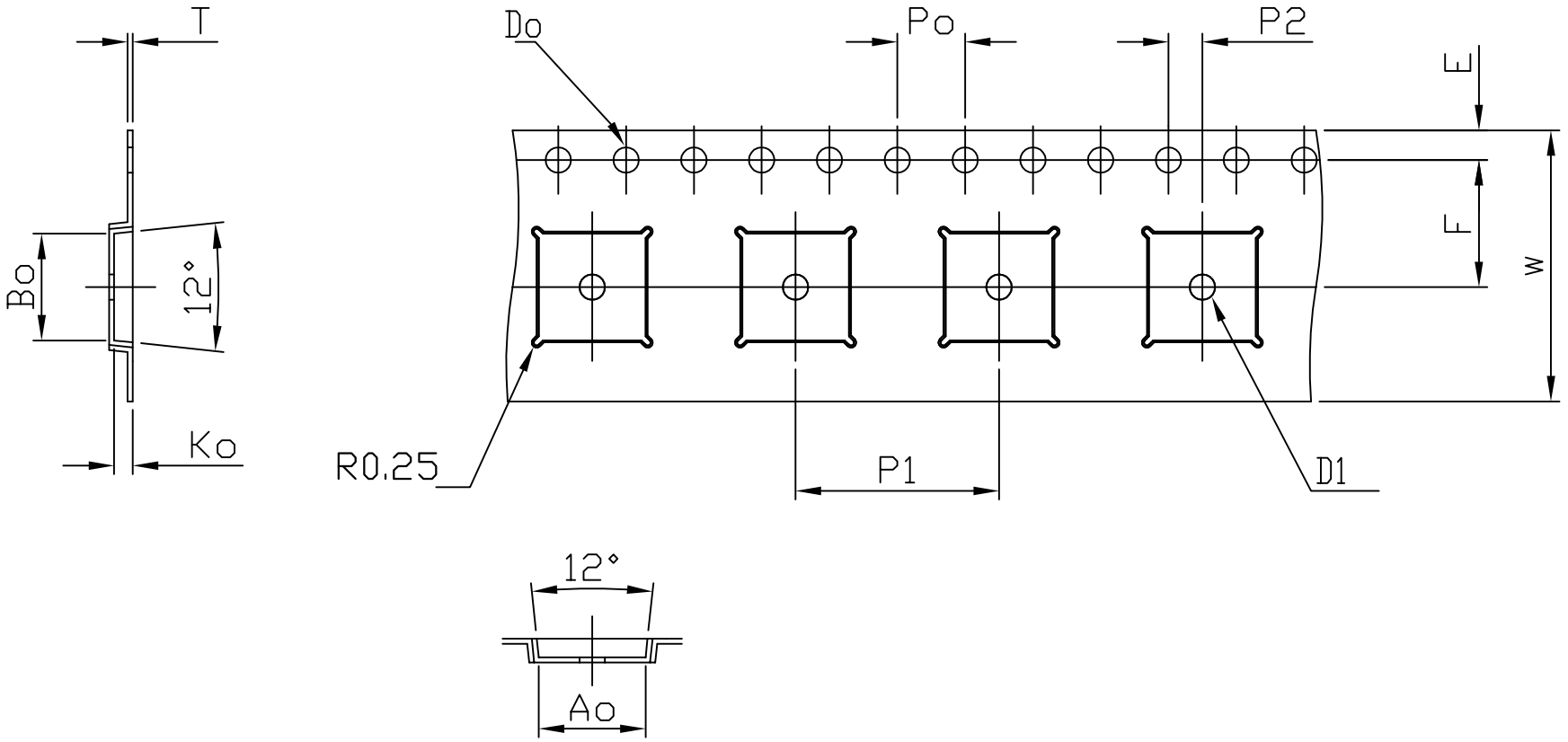
PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT II - PCN #: TB1311-01

Affected Part Numbers (Group B)

Part Number	Part Number	Part Number	Part Number
6INT61041NDG8	5T93GL10NLGI8	8T49N105A-003NLGI8	8T49N205A-003NLGI8
6P41283NDG8	6V49126NLGI8	8T49N105ANLGI8	8T49N205A-004NLGI8
6P41302NDGI8	6V49206NLGI8	8T49N203A-000NLGI8	8T49N205A-005NLGI8
6V49061ANDG8	8P34S1212NLGI8	8T49N203A-001NLG8	8T49N205A-006NLGI8
6V49061NDG8	8SLVP1212ANLGI/W	8T49N203A-001NLGI8	8T49N205A-007NLGI8
6V49125NDG8	8SLVP1212ANLGI8	8T49N203A-002NLGI8	8T49N205A-009NLGI8
9UMS9633BKILFT	8SLVP2106ANLGI/W	8T49N203A-003NLGI8	8T49N205A-999NLGI8
9UMS9633BKLFT	8SLVP2106ANLGI8	8T49N203A-005NLGI8	8T49N205ANLGI8
5T929-10NLGI8	8T43N408A-010NLGI8	8T49N203A-006NLGI8	8T49N205NLGI8
5T929-10NLI8	8T49N006A-000NLGI8	8T49N203A-007NLGI8	8T49N524-001NLGI8
5T929-30NLGI8	8T49N006A-001NLGI8	8T49N203A-009NLGI8	8T49N524-002NLGI8
5T929-30NLI8	8T49N006A-055NLGI8	8T49N203A-010NLGI8	8T49N524-003NLGI8
5T9306NLGI8	8T49N006A-056NLGI8	8T49N203A-012NLGI8	8T49N524-004NLGI8
5T9306NLI8	8T49N006A-057NLGI8	8T49N203A-013NLGI8	8T49N524-005NLGI8
5T93GL06NLGI8	8T49N006A-999NLGI8	8T49N203A-014NLGI8	8T49N524-007NLGI8
5T93GL06NLI8	8T49N006ANLGI8	8T49N203A-015NLGI8	8V14S204NLGI8
5T940-10NLGI8	8T49N008A-000NLGI8	8T49N203A-016NLGI8	95V2F857AKLFT
5T940-10NLI8	8T49N008A-005NLGI8	8T49N203A-017NLGI8	95V857AK-130LFT
5T940-30NLGI8	8T49N008A-012NLGI8	8T49N203A-018NLGI8	95V857AKLF/W
5T940-30NLI8	8T49N008A-016NLGI8	8T49N203A-019NLGI8	95V857AKLFT
5V9885-020NLGI8	8T49N008A-024NLGI8	8T49N203A-023NLGI8	95V857AKLFT/M
5V9885BNLGI8	8T49N008A-030NLGI8	8T49N203A-024NLGI8	95VLP857AKLFT
5V9885C-021NLGI8	8T49N008A-038NLGI8	8T49N203A-025NLGI8	97U877AKLFT
5V9885CNLGI8	8T49N008A-040NLGI8	8T49N203A-027NLGI8	98ULPA877AKILFT
5V9885KNLGI8	8T49N008A-041NLGI8	8T49N203A-999NLGI8	98ULPA877AKLFT
5V9885T-006NLGI8	8T49N008A-044NLGI8	8T49N203ANLGI8	CSPT857CNLG/W
5V9885T-007NLGI8	8T49N008A-045NLGI8	8T49N205-000NLGI8	CSPT857CNLG8
5V9885T-012NLGI8	8T49N008A-046NLGI8	8T49N205-001NLGI8	CSPT857CNLGI8
5V9885T-016NLGI8	8T49N008A-048NLGI8	8T49N205-003NLGI8	CSPT857DNLG8
5V9885T-018NLGI8	8T49N008A-050NLGI8	8T49N205-004NLGI8	CSPU877ANLG8
5V9885T-019NLGI8	8T49N008A-051NLGI8	8T49N205-005NLGI8	CSPU877DNLG/W
5V9885T-020NLGI8	8T49N008A-052NLGI8	8T49N205-006NLGI8	CSPU877DNLG8
5V9885T-021NLGI8	8T49N008A-053NLGI8	8T49N205-007NLGI8	CSPUA877ANLG8
5V9885TNLGI8	8T49N008A-054NLGI8	8T49N205-009NLGI8	CSPUA877ANLGI8
5V9888NLGI8	8T49N008A-055NLGI8	8T49N205-010NLGI8	CSPUA877BNLG8
5V9888T-020NLGI8	8T49N008A-999NLGI8	8T49N205-999NLGI8	CSPUA877BNLGI8
5V9888TNLGI8	8T49N008ANLGI8	8T49N205A-000NLGI8	
8R9306NLGI8	8T49N105A-001NLGI8	8T49N205A-001NLGI8	
5T9310NLGI8	8T49N105A-002NLGI8	8T49N205A-002NLGI8	

Attachment III - Existing Tray part#P8-364-N40



Ao ±0.1	Bo ±0.1	Ko ±0.1	Ki ±0.1	E ±0.1	F ±0.05	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.3	6.3	1.1	NA	1.75	7.5	4.0	12.0	2.0	ø1.5	ø1.5	0.30	16.0

NOTES : (UNLESS OTHERWISE SPECIFIED)
1. SUPPLIER : PCT
2. SUPPLIER PART NUMBER : QFN6x6GP-22B3-360C-SD
3. 10 SPROCKET HOLE PITCHES CUMULATIVE TOLERANCE ±0.2mm
4. REFER TO MSA-3018 FOR THE ALLOWABLE CAMBER REQUIREMENT.
5. MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
6. Ao AND Bo MEASURED ON A PLANE 0.3 MM ABOVE THE BOTTOM OF THE POCKET.
7. Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
8. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE.
9. POCKET CENTER AND POCKET HOLE CENTER MUST BE SAME POSITION.
10. REFER TO MAA-3092 & MSA-3018 FOR THE IDT STANDARD REQUIREMENT FOR CARRIER TAPE.
11. ALL THE DIMENSIONS ARE IN MILLIMETERS (MM).
12. LENGTH PER ROLL = 360 METERS.
13. APPLICABLE TO :
i) ICS MARKET SEGMENT'S ND/NDG 48 EXCEPT 9UMS9633B PRODUCTS.
ii) ICS MARKET SEGMENT'S NL/NLG 40 EXCEPT 95V2F857A, 95V857A, 95VLP857A, 97U877A, 98ULPA877A PRODUCTS.
iii) TA/TAG 68 PACKAGE.

TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL .X ± .25 .XX ± .10 .XXX ± .13
ANGLE ±.5°

APPROVALS	DATE
DRAWN	

IDT®
www.IDT.com
6024 Silver Creek Valley Road,
San Jose, CA 95138
PHONE: (408) 284-8200
FAX: (408) 284-3572

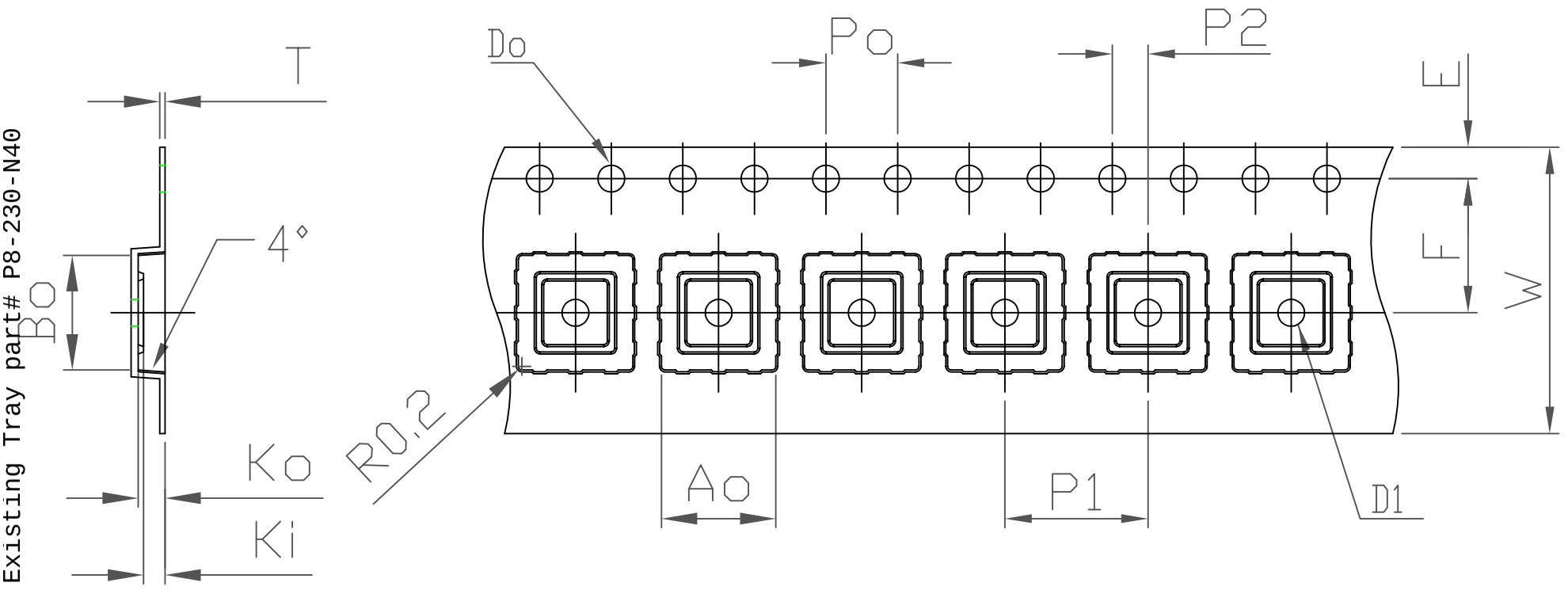
TITLE: ND/NDG 48 , NL/NLG 40 & TA/TAG 68 CARRIER TAPE (PCT)

SCALE: N/A
SIZE:

STOCK NO.	DRAWING NO.	REV
P8-364-N40	MSC-5902	04

DO NOT SCALE DRAWING | SHEET 1 OF 2

Attachment III - Existing Tray part# P8-230-N40



Ao ±0.1	Bo ±0.1	Ko ±0.1	Ki ±0.1	E ±0.1	F ±0.1	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.4	6.4	1.5	1.2	1.75	7.5	4.0	8.0	2.0	ø1.5	ø1.5	0.30	16.0

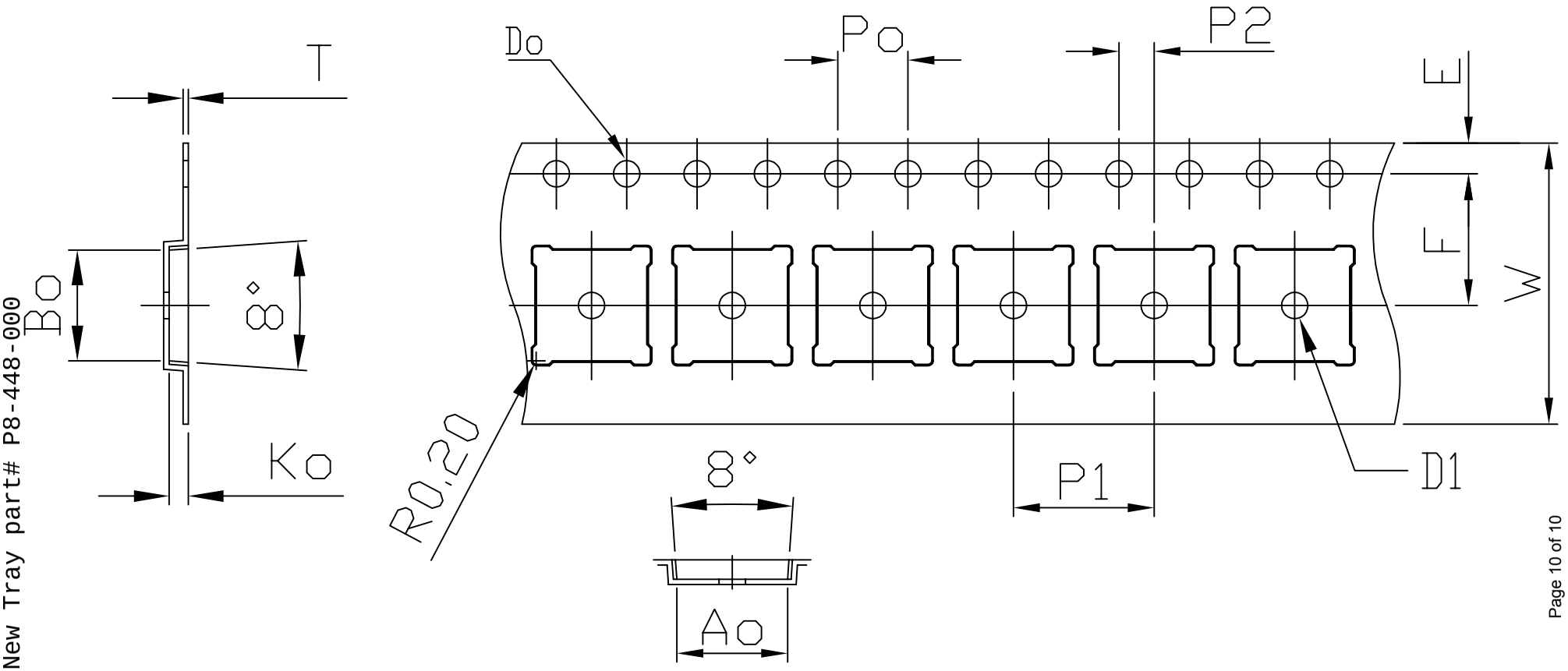
NOTES : (UNLESS OTHERWISE SPECIFIED)
1. SUPPLIER : PCT
2. SUPPLIER PART NUMBER : NL40GP-22B3-360C-SD
3. 10 SPROCKET HOLE PITCHES CUMULATIVE TOLERANCE ±0.2mm
4. REFER TO MSA-3018 FOR THE ALLOWABLE CAMBER REQUIREMENT.
5. MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
6. Ao AND Bo MEASURED ON A PLANE 0.3 MM ABOVE THE BOTTOM OF THE POCKET.
7. Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
8. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE.
9. POCKET CENTER AND POCKET HOLE CENTER MUST BE SAME POSITION.
10. REFER TO MAA-3092 & MSA-3018 FOR THE IDT STANDARD REQUIREMENT FOR CARRIER TAPE.
11. ALL THE DIMENSIONS ARE IN MILLIMETERS (MM).
12. LENGTH PER ROLL = 128 METERS.
13. APPLICABLE TO :
    i) NB/NBG 36 PACKAGE.
    ii) ICS MARKET SEGMENT'S ND/NDG 48 9UMS9633B PRODUCTS ONLY.
    iii) IDT MARKET SEGMENT'S ND/NDG 48 PRODUCTS.
    iv) NL/NLG 28 PACKAGE.
    v) ICS MARKET SEGMENT'S NL/NLG 40 95V2F857A, 95V857A, 95VLP857A, 97U877A, 98ULPA877A PRODUCTS.
    vi) IDT MARKET SEGMENT'S NL/NLG 40
    vii) NT/NTG 48 PACKAGE.

TOLERANCES UNLESS OTHERWISE SPECIFIED	
DECIMAL .X ± .25 .XX ± .13 .XXX ± .13	ANGLE ±.5°
APPROVALS	DATE
DRAWN	

IDT
www.IDT.com
6024 Silver Creek Valley Road,
San Jose, CA 95138
PHONE: (408) 284-8200
FAX: (408) 284-3572

TITLE: NB/NBG 36, ND/NDG 48 & NL/NLG 28/40 & NT/NTG 48 CARRIER TAPE (PCT)		SCALE N/A SIZE
STOCK NO. P8-230-N40	DRAWING NO. MSC-3454	REV 06
DO NOT SCALE DRAWING		SHEET 1 OF 2

Attachment III - New Tray part# P8-448-000



Ao ±0.1	Bo ±0.1	Ko ±0.1	E ±0.1	F ±0.1	Po ±0.1	P1 ±0.1	P2 ±0.1	Do +0.1	D1 +0.1	T ±0.05	W ±0.3
6.3	6.3	1.1	1.75	7.5	4.0	8.0	2.0	ø1.5	ø1.5	0.30	16.0

NOTES : (UNLESS OTHERWISE SPECIFIED)
1. SUPPLIER : PCT
2. SUPPLIER PART NUMBER : QFN6x6P8GP-20B3-360C-SD
3. 10 SPROCKET HOLE PITCHES CUMULATIVE TOLERANCE ±0.2mm
4. REFER TO MSA-3018 FOR THE ALLOWABLE CAMBER REQUIREMENT.
5. MATERIAL : BLACK CONDUCTIVE POLYSTYRENE.
6. Ao AND Bo MEASURED ON A PLANE 0.3 MM ABOVE THE BOTTOM OF THE POCKET.
7. Ko MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
8. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE.
9. POCKET CENTER AND POCKET HOLE CENTER MUST BE SAME POSITION.
10. REFER TO MAA-3092 & MSA-3018 FOR THE IDT STANDARD REQUIREMENT FOR CARRIER TAPE.
11. ALL THE DIMENSIONS ARE IN MILLIMETERS (MM).
12. LENGTH PER ROLL = 360 METERS.
13. APPLICABLE TO :
i) NL/NLG 28 PACKAGE.
ii) IDT MARKET SEGMENT'S NL/NLG 40.
iii) ICS MARKET SEGMENT'S NL/NLG 40 95V2F857A, 95V857A, 95VLP857A, 97U877A, 98ULPA877A PRODUCTS.

TOLERANCES UNLESS OTHERWISE SPECIFIED DECIMAL .X ± .25 .XX ± .13 .XXX ± .13 ANGLE ±.5°	IDT. www.IDT.com 6024 Silver Creek Valley Road, San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572
APPROVALS / DATE	
DRAWN	TITLE: NL/NLG 28/40 CARRIER TAPE (PCT)
	SCALE: N/A
	SIZE
	STOCK NO.: P8-448-000
	DRAWING NO.: MSC-7371
	REV: 00
	DO NOT SCALE DRAWING
	SHEET 1 OF 2