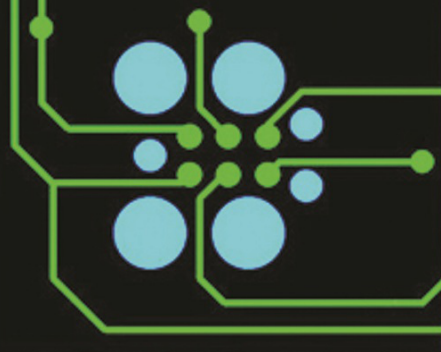




Tag-Connect



PRODUCT DATASHEET

TC2030-CIC-FT232H

Chip-in-Connector™ Adapters

Variations

Hika:

TC2030-CIC-FT232H-3V3
TC2030-NL-CIC-FT232H-3V3

Michi:

TC2030-CIC-FT232H-3V3-DTR
TC2030-NL-CIC-FT232H-3V3-DTR

Noel:

TC2030-CIC-FT232H-5V
TC2030-NL-CIC-FT232H-5V

Kanon:

TC2030-CIC-FT232H-5V-DTR
TC2030-NL-CIC-FT232H-5V-DTR

Supported protocols

USB 2.0 Hi-Speed
UART (USB-to-Serial)
SPI
I²C
JTAG

Interface Standards

USB 2.0 Hi-Speed: 480 Mbps
USB Full Speed: 12 Mbps
UART Baud Rate: up to 12 Mbaud
MPSSE Mode: up to 30 Mbps

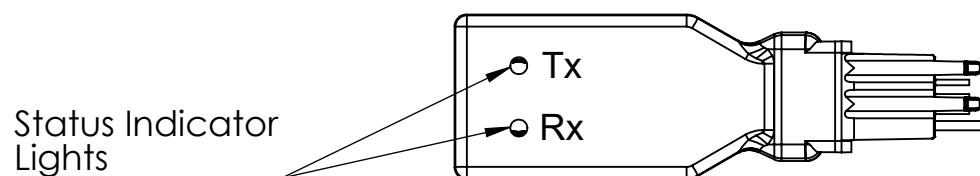
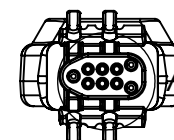
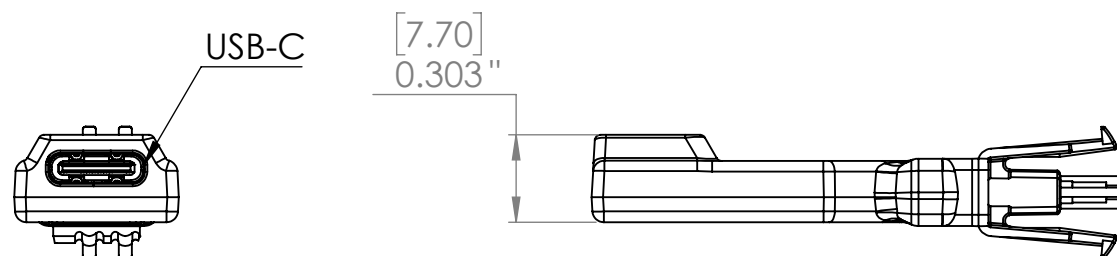
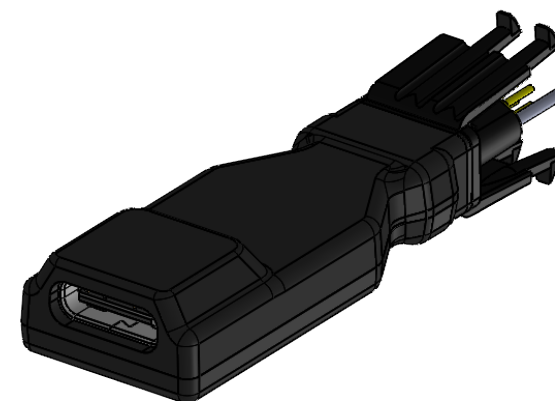
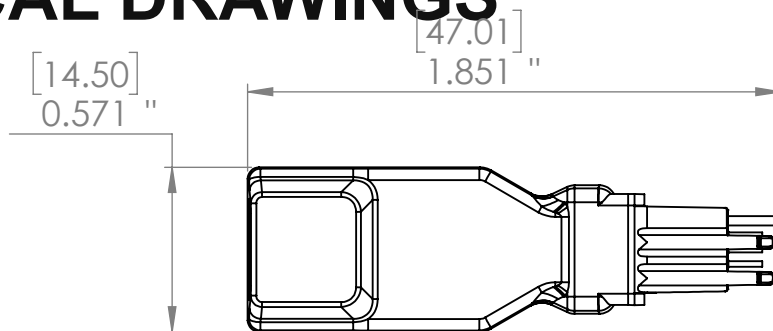
Notes

- Features programmable drive strength.
- For 3V3 and 5V versions: All signal outputs are 3.3V. Data inputs are 3.3V logic level, 5V tolerant. VCC Max current is 250mA continuous, 500mA peak.
- DTR versions support UART only and are ideal for Bootloader control.
- Full FTDI Datasheet for FT232H available at ftdichip.com

2

1

MECHANICAL DRAWINGS



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	0.X: ± N/A 0.XX: ± N/A 0.XXX: ± N/A ANGULAR: ±		PART NUMBER: TC2030-CIC-FT232H	
	MATERIAL: N/A		PART DESCRIPTION: FTDI - 6 Pin Legged	
	FINISH: N/A		SIZE A	REV A
DRAWN BH		CHECKED RH	SCALE: 2:1	SHEET 1 OF 2

2

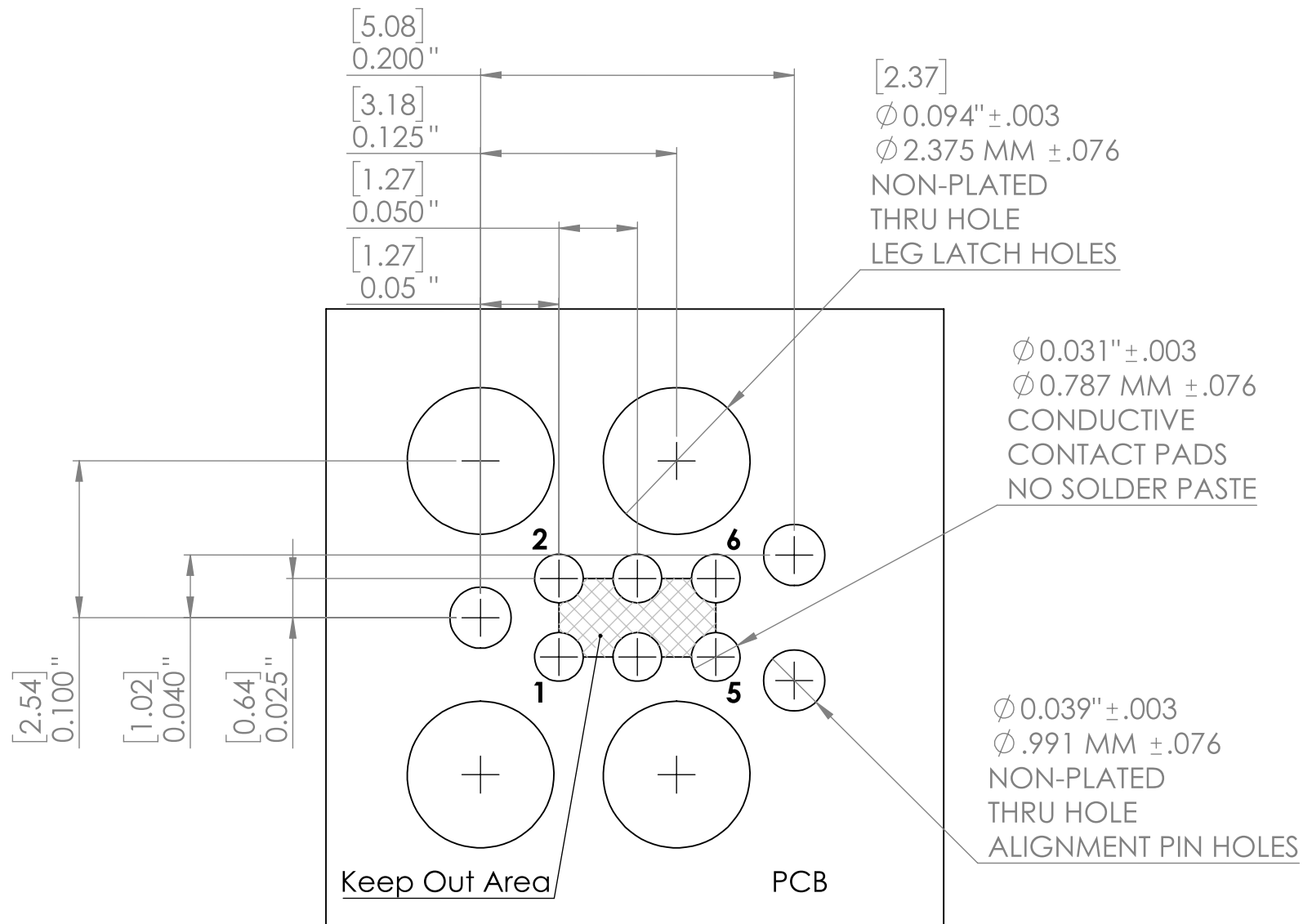
1

B

B

A

A

**BOM Instructions**

Part #	Description	Notes for Assembly
TC2030-FP	Tag-Connect Footprint (TC2030)	Footprint only. Not a physical part. Nothing to Purchase. Do Not Populate.

PROPRIETARY AND CONFIDENTIAL
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DIMENSIONS ARE IN: Inches & TOLERANCES: [MILLIMETERS]
0.X: ± N/A
0.XX: ± N/A
0.XXX: ± N/A
ANGULAR: ±



MATERIAL: N/A
FINISH: N/A

DRAWN BH CHECKED RH

TAG-CONNECT LLC

PART NUMBER: TC2030-FP

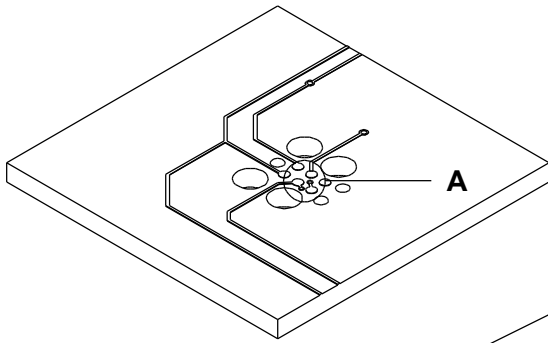
PART DESCRIPTION: Footprint for TC2030 Plug-of-Nails™ - Legged

SIZE A	DWG. NO.	REV A
SCALE: 2:1		SHEET 2 OF 2

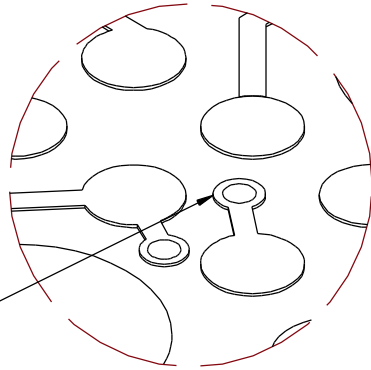
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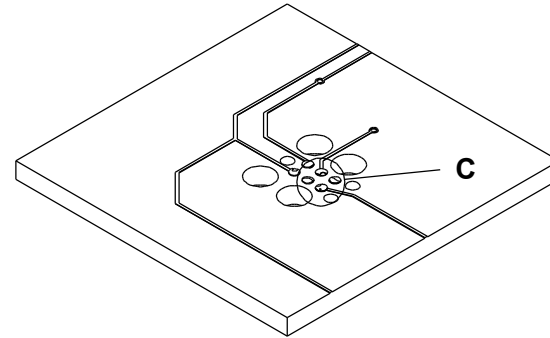
Layout Problems to Avoid



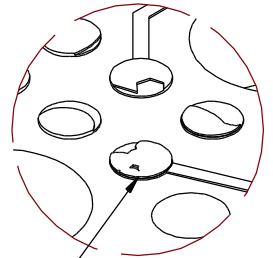
Vias between
contact pads



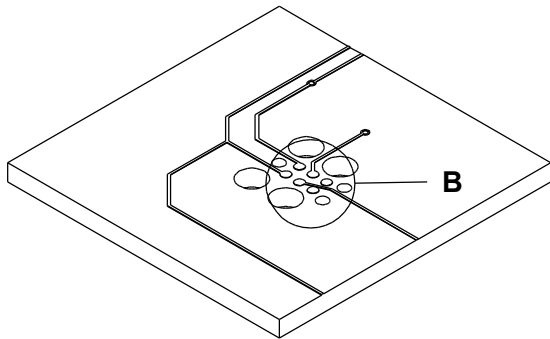
Detail A



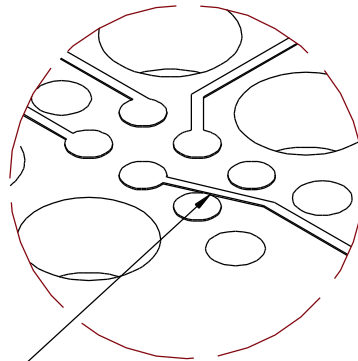
Do not deposit solder paste
on contact pads. View Solder
Paste Mask (Solder Stencil)
layer in pad-stack and eliminate
any hole.



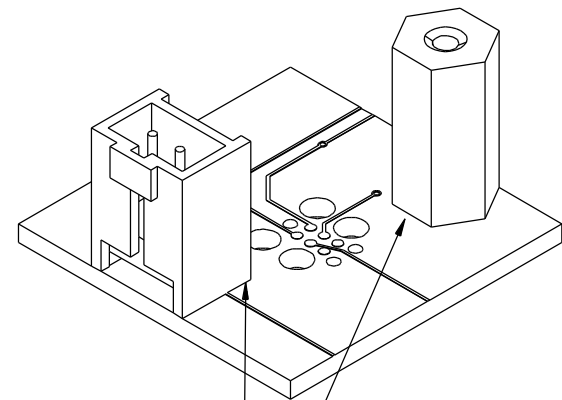
Detail C



Traces less than .02"
away from contact pad
or in "KEEP OUT" area

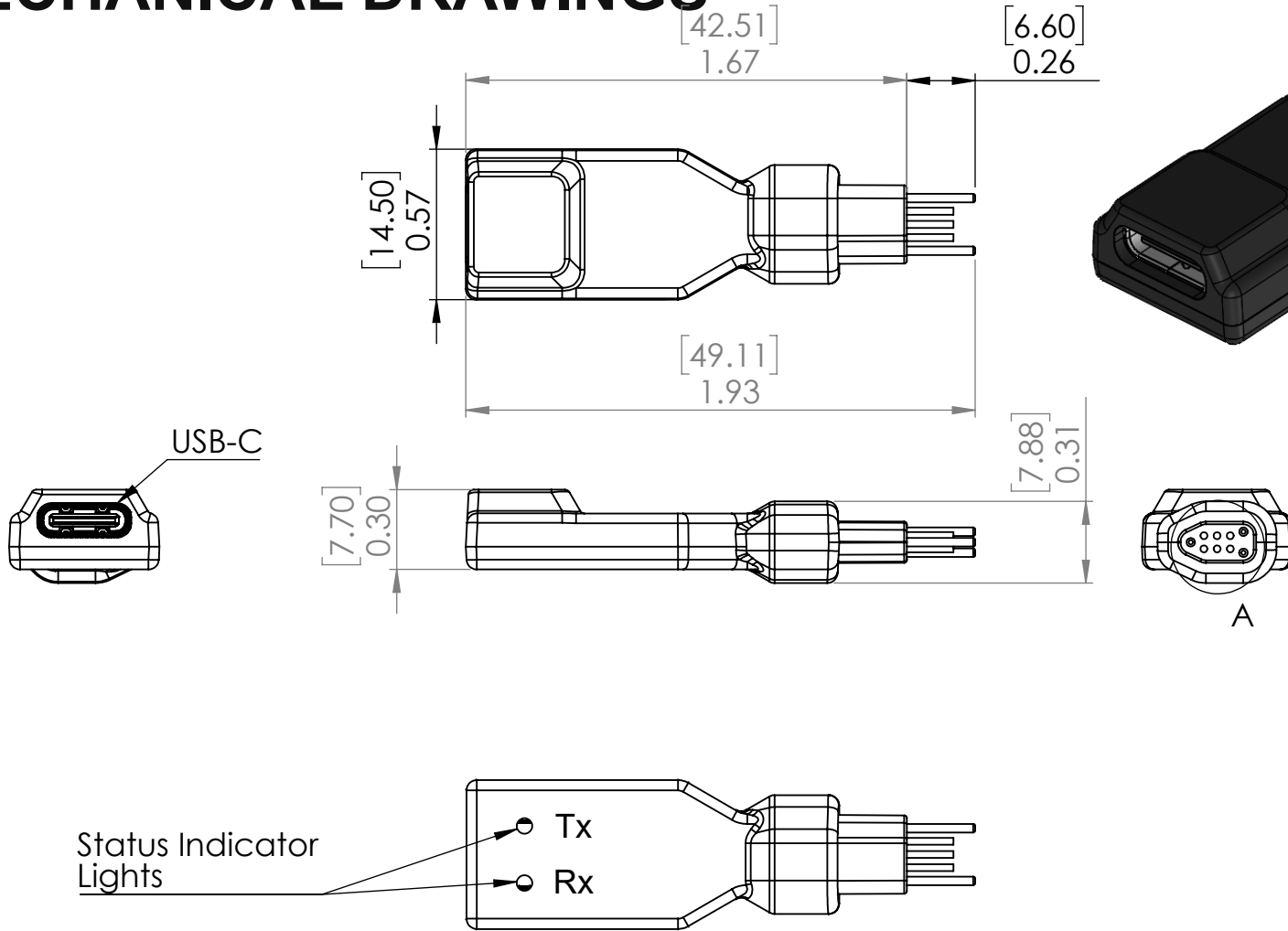


Detail B



Large components
blocking finger access to
the Tag-Connect leg clips

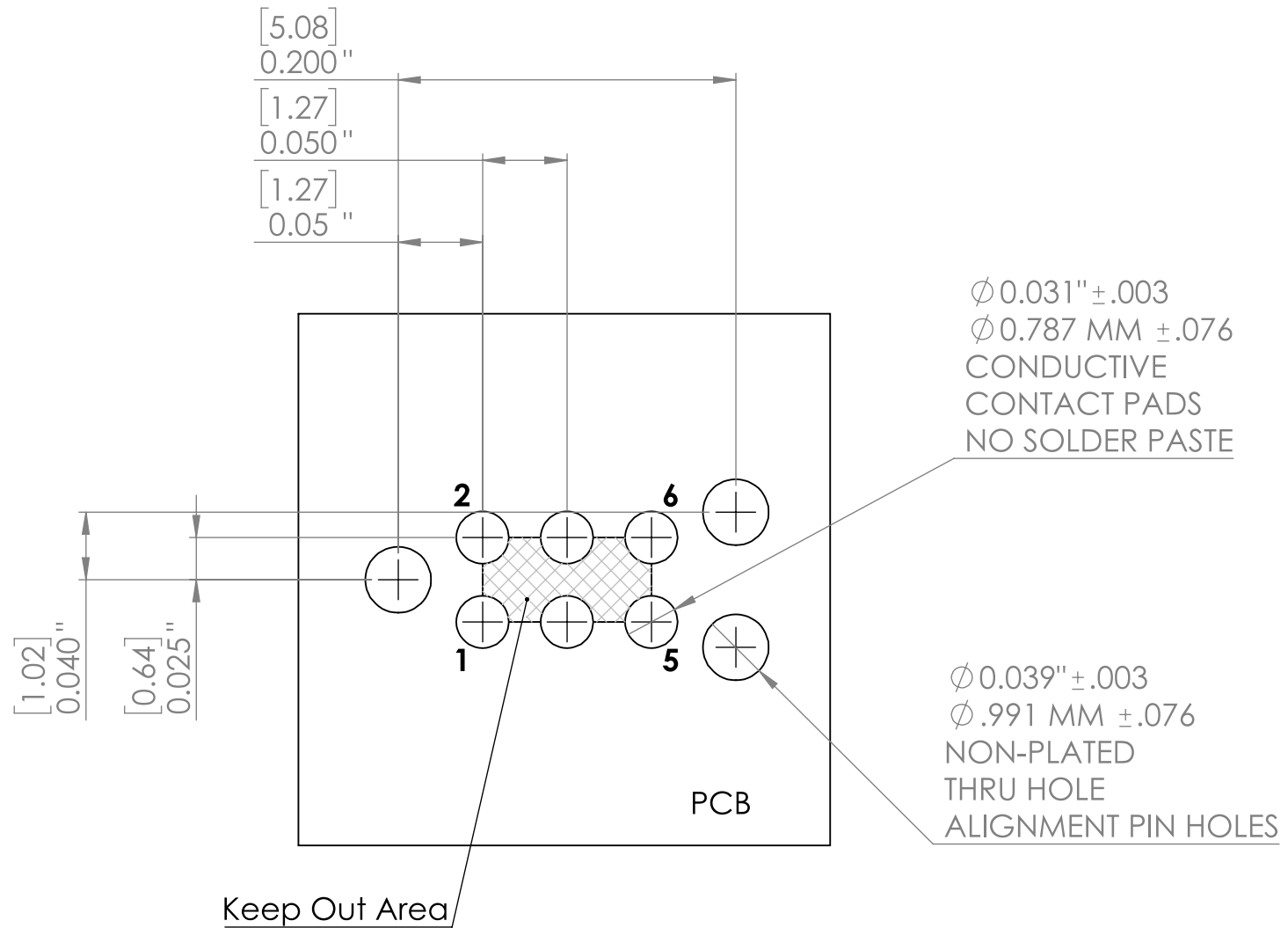
MECHANICAL DRAWINGS



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	0.X: ± N/A 0.XX: ± N/A 0.XXX: ± N/A ANGULAR: ±		PART NUMBER: TC2030-NL-CIC-FT232H		
	MATERIAL: N/A		PART DESCRIPTION: FTDI - 6 Pin No Legs		
	FINISH: N/A		SIZE A	DWG. NO.	REV A
DRAWN RH		CHECKED RH	SCALE: 2:1		SHEET 1 OF 2

B

B

**BOM Instructions**

Part #	Description	Notes for Assembly
TC2030-FP	Tag-Connect Footprint (TC2030)	Footprint only. Not a physical part. Nothing to Purchase. Do Not Populate.

PROPRIETARY AND CONFIDENTIAL
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DIMENSIONS ARE IN: Inches & TOLERANCES: [MILLIMETERS]
0.X: $\pm$ N/A
0.XX: $\pm$ N/A
0.XXX: $\pm$ N/A
ANGULAR: $\pm$



MATERIAL: N/A
FINISH: N/A

DRAWN RH CHECKED RH

TAG-CONNECT LLC

PART NUMBER: TC2030-NL-FP

PART DESCRIPTION: Footprint for TC2030 Plug-of-Nails™ - No-Legs

SIZE A	DWG. NO.	REV A
SCALE: 2:1	SHEET 2 OF 2	

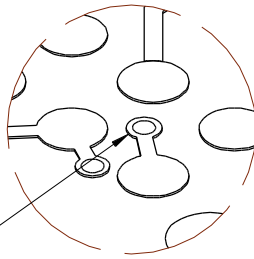
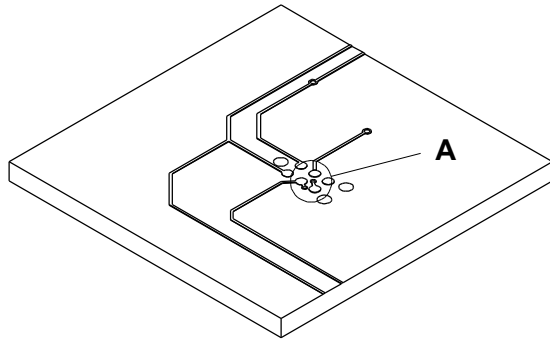
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A

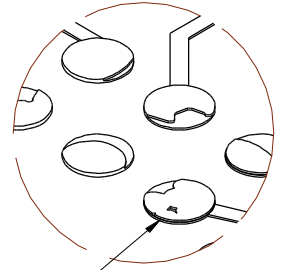
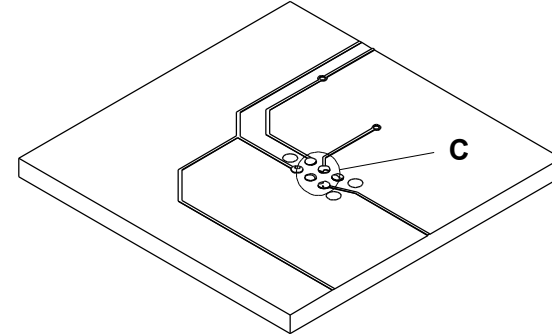
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Layout Problems to Avoid



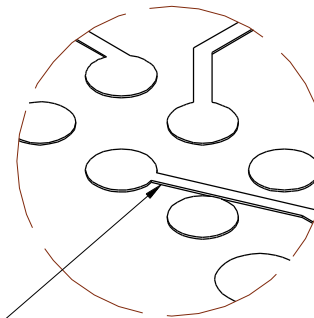
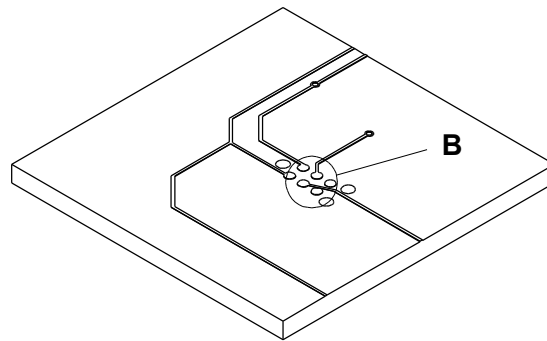
Detail A

Vias between
contact pads



Detail C

Applying solder paste
to contact pads because
of holes in solder Paste Mask



Detail B

Traces less than .02"
away from contact pad
or in "KEEP OUT" area

SIGNALS/CONNECTIONS

Standard

TC2030 Pin	FTDI Signal	Type	Description
1	VCC	Output	Power supply output
2	CTS / TMS	Input	Clear to Send Control input / Handshake signal
3	RXD / TDI	Input	Receive Asynchronous Data input
4	TXD / TCLK	Output	Transmit Asynchronous Data output
5	GND	GND	Device ground supply pin
6	RTS / TDO	Output	Request To Send Control Output / Handshake signal

DTR

TC2030 Pin	FTDI Signal	Type	Description
1	VCC	Output	Power supply output
2	DTR	Output	Data Transmit Ready modern signaling line
3	RXD	Input	Receive Asynchronous Data input
4	TXD	Output	Transmit Asynchronous Data output
5	GND	GND	Device ground supply pin
6	RTS	Output	Request To Send Control Output / Handshake signal