



Phone: (248)588-7220
Fax: (248)588-5236

Quote Number: 14379

Debron Industrial Electronics Inc
591 Executive Drive
Troy MI 48083-4507

QUOTE

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<p>Quote To:</p> <p>MICHIGAN STATE UNIVERSITY 2150 BIOMEDICAL & PHYSICAL SCIENCES BUILDING EAST LANSING MICHIGAN USA</p>	<p>Date: 3/6/2017 Expires: 4/5/2017 Reference:</p> <p>Sales Person: GEORGE CHERRICK</p>
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Subject to Debron's conditions of sale. Payment terms: Net 30 days, F.O.B. Troy, Michigan

ASSUMPTION/COMMENTS

REVISED QUOTE TO INCLUDE THE FOLLOWING BASED UPON DAN EDMUNDS GERBER AND NEW DOCUMENTATION RELEASE 2/16/2017:

UPDATED PCB & ASSEMBLY PRICING BASED UPON CHANGES MADE BY MSU.

UPDATED PROGRAMMING AND ELECTRICAL TESTING CHARGES BASED UPON CHANGES MADE BY MSU.

T&R LINE ITEM AS WELL AS STORAGE OF COMPONENTS ADDED PER MSU.

ALSO UPDATED PRELIMINARY PRODCUTION COST BASED UPON CHANGES.

LINE ITEM FOR BLANK PCB TO BE SENT TO MSU BEFORE ASSEMBLY INCLUDED PER MSU.

PCB NOTES:

QUOTE IS BASED UPON FAB DRAWING/NOTES ONLY, NO GERBER DATA SUPPLIED.

PRICES ARE BUDGETARY AND SUBJECT TO REVIEW OF DESIGN AND ALL APPLICABLE DOCUMENTATION.

ASSUMED: ENIG FINISH PER IPC4552; THRU HOLES ONLY, FR408HR MATERIAL.

*F221
FR408HR MATERIAL
DELIVERY TIME DEPENDS UPON THE AVAILABILTY OF MATERIAL AT TIME OF ORDER.*

A FULL LOT OF SPECIAL MATERIAL WILL BE PURCHASED FOR THIS ORDER UPON RECEIPT OF THE P.O. IF ORDER IS CANCELLED, CUSTOMER WILL BE RESPONSIBLE FOR THE FULL LOT OF MATERIAL PURCHASED FOR THE ORDER.

THE QUOTE ASSUMES NO WIRE BONDING WILL BE USED ON THIS PCB, CONTACT US IF WIRE BONDING IS APPLICABLE.

ESTIMATED LEAD-TIME FOR 9PC PROTOTYPE BUILD:

DEBRON ANTICIPATES A 12 WEEK LEAD-TIME FOR THE MANUFACTURING OF THIS PROTOTYPE BUILD.



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THE MAJOR LEAD-TIME ITEM WILL BE THE MANUFACTURING OF THE PCB. OUR BOARD HOUSE WHOM SUCCESSFULLY MANUFACTURED THE CMX CARD FOR MSU QUOTED A FOUR WEEK LEAD-TIME TO MANUFACTURE. DEBRON HAS INCLUDED FOUR ADDITIONAL WEEKS TO THIS TIME FRAME AS GERBERS WILL NEED TO BE SUPPLIED BY MSU FOR DEBRON AND OUR BOARDHOUSE TO REVIEW. ALSO THERE WILL HAVE TO BE ONE OF MORE THREE WAY CONFERENCE CALLS BETWEEN MSU/DEBRON/BOARDHOUSE TO MAKE ENSURE THIS IS SUCCESSFULLY PRODUCED TO MSU SPECIFICATIONS.

OTHER LEAD-TIME CONCERN IS XILINX MECHANICAL SAMPLE WHICH CAN ONLY BE PURCHASED THROUGH AVENT DOES NOT HAVE A LEAD-TIME THEY CAN PRODUCE UNTIL AN ORDER IS PLACED. DEBRON'S ASSUMPTION IS WE WILL HAVE SAMPLE DURING THE EIGHT WEEK TIME PERIOD WE ARE WAITING FOR THE PCB SO WE CAN TRANSITION DIRECTLY INTO THERMAL PROFILING.

ALL OTHER LEAD-TIMES CONCERNS ARE MATERIAL DEPENDANT AS MSU IS SUPPLYING.

Line	Part Number	Description	Revision	Drawing
1	TBD	THERMAL PROFILE & AOI		
	Our Part: TBD	Rev:		
		<i>THERMAL PROFILE & A.O.I \$2,931.96 COST BREAK DOWN</i>		
		<i>\$1,810.16 PCB PRICE</i>		
		<i>\$ 611.03 THERMAL PROFILE COMPONENTS</i>		
		<i>\$ 510.77 THERMAL PROFILE & A.O.I. ENGINEERING</i>		
		<u>Quantity</u>	<u>UM</u>	<u>Unit Price</u>
		1.00	EA	2,931.96000



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Line	Part Number	Description	Revision	Drawing
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2	TBD	HUB MODULE ASSEMBLY	Rev:	
	Our Part: TBD			

ESTIMATED-LEAD-TIME:

PLEASE REVIEW ASSUMPTION/COMMENT SECTION UNDER LEAD-TIME.

UNIT PRICE ASSUMES MSU SUPPLYING ALL COMPONENTS & DEBRON PURCHASING PCB & PROVIDING ALL LABOR.

UNIT PRICING BREAKDOWN OF \$2217.10 IS AS FOLLOWS:

\$1810.16 PCB COST

\$ 406.94 BUILD LABOR

- Miscellaneous Charge -

- 1,164.16 PRESS FIT TOOLING
- 1,459.00 PROGRAMMING CHARGE
- 962.50 STENCIL
- 2,200.00 PCB TOOLING CHARGE
- 1,832.40 PCB E-TEST
- 250.00 T&R CHARGES
- 1,200.00 STORAGE OF COMPONENTS

<u>Quantity</u>	<u>UM</u>	<u>Unit Price</u>
9.00	EA	2,217.10000



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Line	Part Number	Description	Revision	Drawing
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3	TBD	HUB MODULE (PRELIMINARY PRODUCTION PRICE)		
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ESTIMATED LEAD-TIME - TBD

THE PROVIDED PRODCUTION PRICE IS BUDGETARY AND WILL BE FINALIZED WHEN PROTOTYPE BUILD IS COMPLETE & REVIEWED TO INCORPORATE ANY CHANGES NEEDED FOR PRODUCTION.

NO ADDITIONAL TOOLING HAS BEEN ADDED TO THIS LINE ITEM AS THIS QUOTE ASSUMES NO PCB CHANGES & OR BOM CHANGES WILL OCCUR BETWEEN PROTOTYPE & THE PRODUCTION PHASE. IF ENGINEERING CHANGES OCCUR DEBRON WILL REVIEW AND APPLY THE NECASSARY AND APPLICABLE FINANCIAL CHARGES (NEW STENCIL, PROGRAMMING, ETC)

UNIT PRICING BREAKDOWN OF \$1,872.24 IS AS FOLLOWS:

*\$1,599.89 PCB COST
 \$ 272.35 BUILD LABOR*

<u>Quantity</u>	<u>UM</u>	<u>Unit Price</u>
23.00	EA	1,872.24000

Line	Part Number	Description	Revision	Drawing
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4	TBD	BARE BOARD FOR MSU		
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Our Part: TBB

Rev:

PER DAN EDMUNDS REQUEST DEBRON WILL PROVIDE A BLANK BARE PCB CARD TO MSU BEFORE ASSEMBLY STARTS. (CARD DOES NOT HAVE TO HAD PASSED ELECTRICAL TEST)

<u>Quantity</u>	<u>UM</u>	<u>Unit Price</u>
1.00	EA	1,810.16000

Subject to Debron's "Conditions of Sale", dated 09/19/02.
 Thank you for the opportunity to quote.