



**ITI LIMITED**  
A Govt. Of India Undertaking  
Dooravaninagar Bangalore  
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Due Date 04-10-2021 15:00

ENQUIRY FOR PR M61211001

Date 17-09-2021 13:24

**Respected Sir** Kindly quote your best prices and deliveries for the below mentioned components.

Sino	Item and Description	Quantity	Unit
1	PC 006859A STM OPTICAL CARD  A0029 ( PCB ) PCB	20.0000	Number of Units

**NOTE :**

1. PLEASE SEND YOUR QUOTE IN A SEALED COVER SUBSCRIBING OUR ENQUIRY NUMBER AND THE DUE DATE ON THE ENVELOPE SHOULD REACH US ON OR BEFORE DUE DATE BY 3.00 PM.
2. OFFER THROUGH EMAIL WILL NOT BE CONSIDERED.
3. TERMS AND CONDITIONS AS PER ENCLOSURE.
4. OUR PAYMENT IS 60 DAYS CREDIT.
5. YOUR QUOTED PRICE SHALL BE ALL INCLUSIVE FOR ITI LTD.BANGALORE

**Special Note:** \* KINDLY PROVIDE UDYAM REGISTRATION CERTIFICATE IF MSME REGISTERED ENTERPRISE

\* KINDLY MENTION SUBJECT AS "QUOTATION FOR STM OPTICAL CARD"; RFQ # AS "M61211001" & DUE DATE AS "04.10.2021" OVER ENVELOPE WITHOUT WHICH QUOTATION WILL NOT BE CONSIDERED FOR TENDERING

\* KINDLY ACKNOWLEDGE THE RECEIPT OF ENQUIRY BY RETURN MAIL

\* KINDLY CONFIRM WHETHER QUOTATION SUBMITTED BY PERSONAL DEPOSIT OR THROUGH ANY COURIER SERVICES (PROVIDE DOCKET REFERENCE)

\* KINDLY PROVIDE DATASHEET / TECHNICAL COMPLIANCE / SPECIFICATION DOCUMENT ALONG WITH QUOTATION

\* KINDLY SUBMIT YOUR VALUABLE QUOTATION AS PER ATTACHED TECHNICAL SPECIFICATION

Deputy General Manager

Central Purchase,

ITI Limited,Dooravaninagar

Bangalore-560016

Thanking You.

Yours Faithfully,

For I.T.I Limited

Deputy General Manager - IMM

## GENERAL TECHNICAL SPECIFICATIONS FOR PCB

### 6859-iss1 Card

#### GENERAL SPECIFICATION

- 1) All the trace width specified in the gerber will be finished trace widths and are maximum.
- 2) 6-Layer PCB with both through hole and SMD components, including fine pitch components.
- 3) In thermal pad areas, vias masking should be open.

#### PCB SPECIFICATION

1) PCB name	:	6859 -iss1
2) PCB-type	:	6 layer
3) Density Classification	:	E
4) ML Build-up	:	Customer Build-up (Build-up enclosed)
5) No. of reference layers	:	4
6) Required Impedance Tolerance	:	$\pm 10\%$
7) Material	:	FR4,170 Deg Tg
8) Length	:	114.30 mm
9) Width	:	64.77 mm
10) Thickness	:	1.60 mm (thickness calculation enclosed)
11) Panel Size	:	NA
12)No of PCBs per panel	:	NA
13) Surface Plating	:	ENIG
14) Photo Imageable Solder Mask	:	2 Nos.
15) Component legend (in white ink)	:	2 Nos.
16) Impedance control	:	Yes

#### TRACE DETAILS

1) Min. trace Width	:	8 mils in all electrical layers
2) Min Trace to Trace Gap	:	8 mils in all electrical layers
3) Min Trace to Pad Gap	:	8 mils for SMD
4) Min Drill	:	20 mil

### 6859-iss1

#### 6 LAYER PCB CONSTRUCTION

		Layer stack up	
L1	Signal Tracks	0.035	Finish Copper
		0.175	1*7628 prepreg
L2	Ground Planes	0.035	Inner layer
		0.300	1/1 0.3mm Laminate
L3	Power Planes	0.035	Inner layer
		0.420	4*2116 prepregs
L4	Power Planes	0.035	Cu foil+plating
		0.300	1/1 0.3mm Laminate
L5	Ground Planes	0.035	Inner layer
		0.175	1*7628 prepreg
L6	Signal Tracks	0.035	Finish Copper
	<b>Total Thickness</b>	<b>1.58 +/-10% mm</b>	

➤ Controlled impedance signals as per below table:

IMPEDANCE :100 OHM DIFFERENTIAL					
Layer	Impedance types	Reference layer	Suggested Gerber trace width /spacing	Targeted Impedance	Achieved impedance
L1	Differential	L2	8.00 MIL/8.00 MIL	100 ohm	102.12 ohm +/-10%
L6	Differential	L5	8.00 MIL/8.00 MIL	100 ohm	100.32 ohm +/-10%
Note:1)Above calculation based on 4.30 dielectric constant of available material. Note:2)Above calculation based on available FR4 135TG material with us recently. Note:3)Above calculation are theoretically, impedance practical values may changed in +/-10%					

