



Department of Electrical Engineering  
Indian Institute of Technology, Delhi  
Hauz Khas, New Delhi 110016

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Date: **November 14, 2024**

FT/2023/11/19- IA/2401

Sealed/online/e-mail quotations are invited for fabrication of a custom SPAD sensor in 0.18  $\mu\text{m}$  process. The required specifications are given below.

**Required Specifications for fabrication of a custom integrated circuit on a 0.18 $\mu\text{m}$  CMOS process**

1. A custom design should be fabricated in a SPAD 0.18 $\mu\text{m}$  process.
2. The total area of the integrated circuit is 4240 $\mu\text{m}$  x 5000 $\mu\text{m}$ , including the die-seal ring.
3. A total of at least 40 parts are required. The parts should be diced from the wafer.
4. The specifications include
  - Pixel pitch: 20  $\mu\text{m}$
  - PDE : >5% at 905 nm
  - DCR: 0.6 Hz/ $\mu\text{m}^2$  CPS
  - Breakdown voltage: 20.5 V
  - ADC output: 10 bits
  - Frame rate: >30 fps
  - Output type: LVDS
  - Power consumption: < 2 W

**Dr. M. Sarkar**  
(Chairman, purchase committee)

## Terms and Conditions

1. The quote should reach the following address on or before **05.12.2024, 5 PM.**  
Dr. M. Sarkar  
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2. Please quote prices for FOB New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.
4. Please specify all of your terms and conditions clearly, including delivery period.
5. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or through wire transfer on delivery. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.
6. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.

**Dr. M. Sarkar**  
(Chairman, purchase committee)