

March 21, 2002

Fabrication and Assembly of TileCal Optical Interface Board

1. We wish to procure 264 assembled printed circuit boards as specified in the drawing B-2468(V3.3). In addition, we wish to obtain 8 blank (unassembled) boards to be returned to the University of Chicago as spares following the assembly of the other boards. Should the quantities specified in the purchase order differ from these quantities, the purchase order has precedence.
2. The University of Chicago will supply all parts. The vendor is responsible for PCB fabrication and for component mounting on the PCBs.
3. The finished assemblies must conform to the Gerber files, and drawings supplied by the University of Chicago.
4. The PCBs should be fabricated with FR4 material having a minimum transition temperature of 170°C.
5. Prior to production of any PCBs the artwork must be inspected and approved by the University of Chicago.
6. The boards may be panelized for production but the finished assemblies must conform to the supplied mechanical drawings and be thoroughly cleaned prior to delivery.
7. Prior to assembly, each bare PCB should be 100% tested for shorts and continuity according to the supplied net list. The boards used for assembly must pass these tests without being repaired.
8. “No-wash” solder flux should NOT be used.
9. The optical components, parts U1, U3, and U63, should not be immersion washed. They must be mounted only after the mounting and washing of all other components on the board.
10. Vendor will affix self-adhesive serial number bar-code labels supplied by the University of Chicago in the indicated position on each board. Serial numbers will correspond to the production sequence of the component placement process. Serial numbers, together with the date, time, machine, and operator will be logged at the start and stop of each production run and at the time of any anomaly in the production. A copy of this production log will be provided to the University of Chicago.
11. The first shipment will be 5 completed assemblies. These will be sent to the University of Chicago for testing and approval. Further production should be placed in a hold status until these tests are complete and satisfactory. This step will require assemblies to be at the university for 3 days.

12. Upon approval of the above sample of 5 boards, the balance may be assembled, shipped, and invoiced.
13. All delivered boards must satisfy the quality control requirements given in the corresponding file of this name which is part of these specifications.
14. Guarantee – The vendor shall be responsible for all workmanship attributes. Since the final testing will not be complete for a period of six months after delivery of the final assembly, the period of warrantee shall be an equal period of six months.
15. The vendor agrees to correct workmanship errors in the assemblies that have been indicated and located by tests at the University. The corrections shall be made in 15 working days.
16. First delivery is requested no more than 6 weeks after receipt of components from the University of Chicago. All deliveries should be complete within 6 months from the first delivery.
17. Unused components and unassembled boards should be returned to the University of Chicago at the conclusion of the assembly work.

Shipping address:

Electronics Development Group
Enrico Fermi Institute
University of Chicago
5641 S. Ingleside Ave.
Chicago, IL 60637

University of Chicago contact:

Mr. Harold Sanders, Head of Engineering
harold@frodo.uchicago.edu
773-702-7801