

Orchid Technologies

SC1B Hashing Board PCB Assembly – Revision D

Build Instructions

Prepared By: Orchid Technologies Engineering and Consulting, Inc.
147 Main Street
Maynard, Ma. 01754
978-461-2000

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This document is presented to assist you in appraising the potential value of the SC1B HASHING BOARD Build Instructions based upon the information which you have provided to us concerning your needs. Naturally, your requirements may change as business conditions and your operations change. Only you can determine the feasibility of the proposed SC1B HASHING BOARD Build Instructions to answer your specific business needs. Consequently, while we believe that our SC1B HASHING BOARD Build Instructions are sound, it cannot constitute express or implied warranties of merchantability and fitness for a particular purpose.

Revision History:

Revision	Date	Reason
1.0	September 19, 2018	Original

This document contains the assembly-time instructions for the proper build of SC1B HASHING BOARD Revision D Printed Circuit Boards. These Instructions together with the following documents comprise the SC1B HASHING BOARD Revision D Circuit Board Fabrication and Assembly data base.

Related Documentation:

1. SC0052818 Revision D September 19, 2018 Schematic Data Base
2. SC1B_091918.xls Bill of Materials – Base Bill
3. SC1B HASHING BOARD PCB, Revision D Data Base Assembly and Fabrication Artwork as released by Orchid Technologies using SC052818 Revision D schematic and the SC1B_091918.xls BOM data base.

The documents listed above are considered finished documents and will not be modified by Orchid Technologies Engineering and Consulting, Inc. until Phase 2 of the project. All modifications to the documents listed above will take the form of notes and appear in this document as revised.

Documentation Errata, Changes, Acceptable Procedures:

All component stuffing and board options reference SC1B_091918.xls. Please use SC1B_091918.xls, as the basic guideline for board stuffing options.

0. DO NOT POWER BOARDS

1. Do Not Populate components with values “DNP”.
2. Do Not Populate components with values prefixed “DNP-“.
3. **Special Population Boards:** Note the following 32 ASIC BGA locations for special population options:

U201	U1001	U1801	U2601
U301	U1101	U1901	U2701
U401	U1201	U2001	U2801
U501	U1301	U2101	U2901
U601	U1401	U2201	U3001
U701	U1501	U2301	U3101
U801	U1601	U2401	U3201
U901	U1701	U2401	U3301

- 3a. Populate **two boards** with **BLAKE128X DCR 1** in the above ASIC locations
- 3b. Populate **two boards** with **BLAKE64X SC1** in the above ASIC locations
4. **Completed assemblies shall be free of any and all flux residues.**

Known BOM Discrepancies and AVL issues:

BOM Updates:

Item No	Description

AVL Issues:

Item No	Description
	None

Programmable Logic Instructions:

This describes the programmable device data files and their uses.

U3401 Must be pre-programmed. Program file TBS/

SC1B HASHING BOARD Revision D Rework Instructions:

Perform the instructions listed below on all SC1B HASHING BOARD Revision D Circuit Boards.

Item	Action	Disposition