

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ECO 2136068: Initial Release	09/06/2013	HPC
B	ECO 2138778: Up-date title block; file names	02/14/2014	HPC
C	ECO 2140609: Up-date file names	03/14/2014	HPC

		TI Information SELECTIVE DISCLOSURE		TEXAS INSTRUMENTS INCORPORATED © COPYRIGHT 2014 TEXAS INSTRUMENTS UNPUBLISHED, ALL RIGHTS RESERVED		
		DWN/CHK Paul Cleveland	DATE 02/14/2014	CCA, NIRscan Spectro Board		
		SYS ENGR				
	0314CP	MANU				
NHA	USED ON	QA		SIZE A	DRAWING NO 2513473	REV C
APPLICATION		APVD		SCALE NONE	SHEET 1 OF 5	

1. Scope

The purpose of this document is to establish the assembly requirements for the Spectro Board.

2. Related Documents

Texas Instruments Documents

Dwg. Number	Document Name
2513471	2453462d_NIRscan_Spectro_Board_ESD
2513472	2453463b_NIRscan_Spectro_Board_PCB

3. Notes

1. This PCB contains devices which are electrostatic discharge sensitive.
2. Mark the appropriate Manufacturing Serial Number (MSN) on the top of the PCB. Method and placement location optional.
3. Mark assembly number, assembly dash number and revision letter of CCA on the top of the PCB. Method and placement location optional.
4. Workmanship to be in accordance with ANSI/IPC-A-610B Class 2 and ANSI/J-STD-001A Class 2.
5. Equivalent or better part may be substituted.
6. Solder times and temperatures to be in conformance with PWB UL component recognition limits established for the particular board. The solder profile must also comply with the limits of all components on the PCB.
7. Components and processes should be lead-free and ROHS compliant.

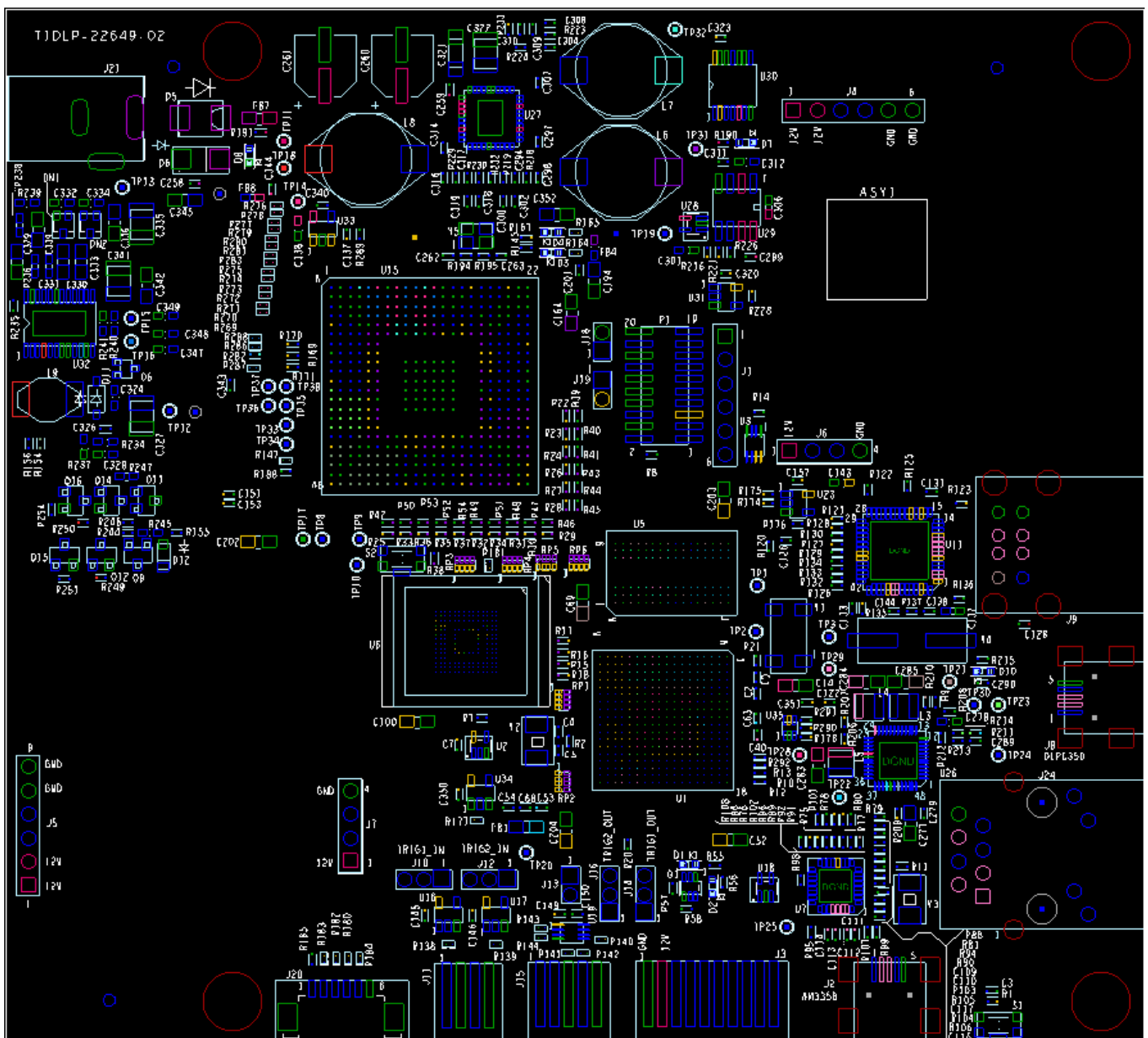
4. Bill of Material & Cross Reference List

Assembly bill of material and cross reference list are provided in attached spread sheet.

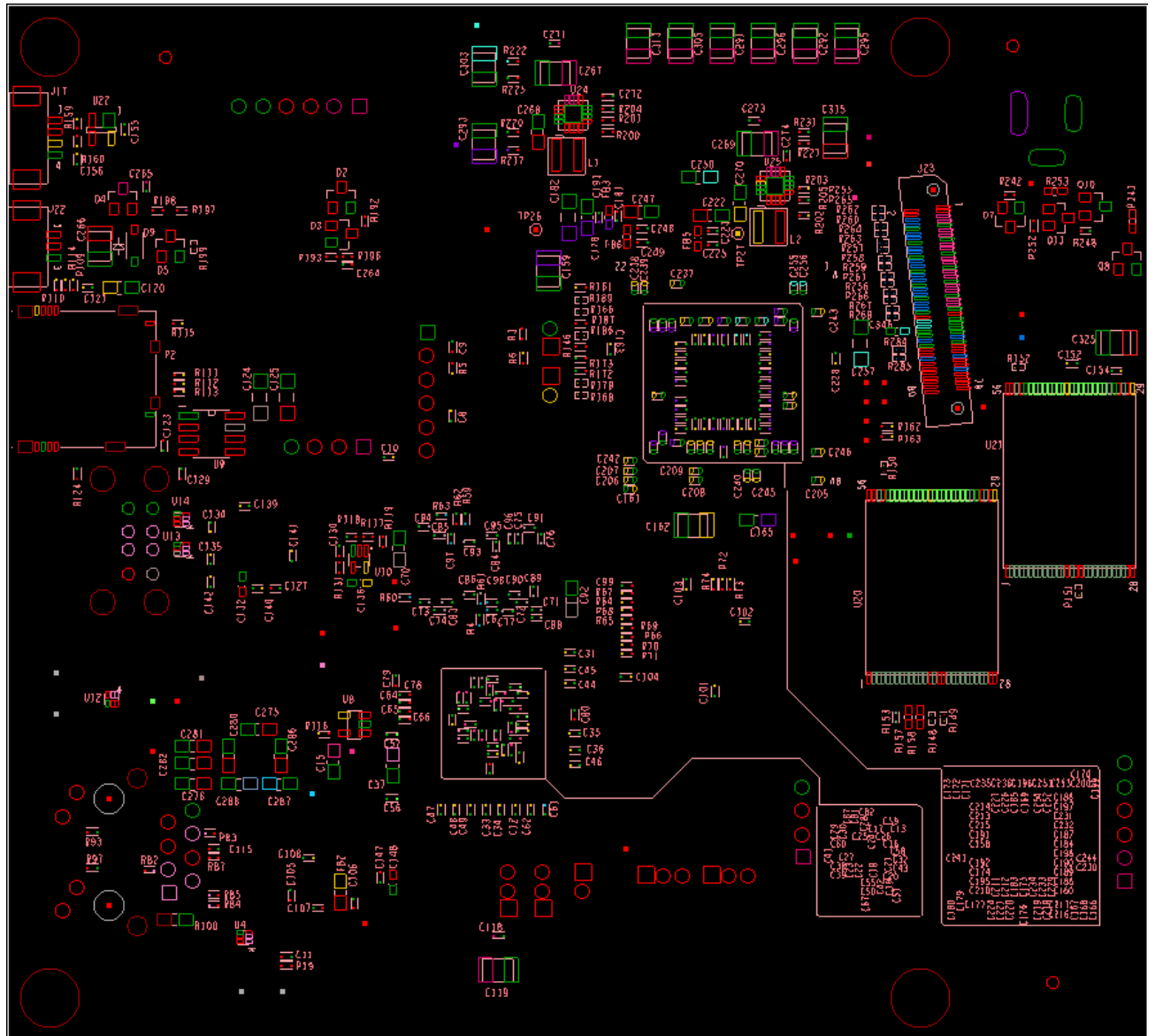
Assembly Dash	Description	Material & Cross Reference List Spread Sheet
-1	Spectro Board	2513465d_NIRscan_Spectro_Board_BOM

5. Assembly Diagrams

Spectro Board Top



Spectro Board Bottom



IMPORTANT NOTICE concerning TI Semiconductor Products

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46C and to discontinue any product or service per JESD48B. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products (also referred to herein as “components”) are sold subject to TI’s terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI’s terms and conditions of sale of semiconductor products. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers’ products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers’ products and applications, Buyers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of significant portions of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards which anticipate dangerous consequences of failures, monitor failures and their consequences lessen the likelihood of failures that might cause harm and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI’s goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed a special agreement specifically governing such use.

Only those TI components which TI has specifically designated as military grade or “enhanced plastic” are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components which have *not* been so designated is solely at the Buyer’s risk, and that Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components which meet ISO/TS16949 requirements, mainly for automotive use. Components which have not been so designated are neither designed nor intended for automotive use; and TI will not be responsible for any failure of such components to meet such requirements.