



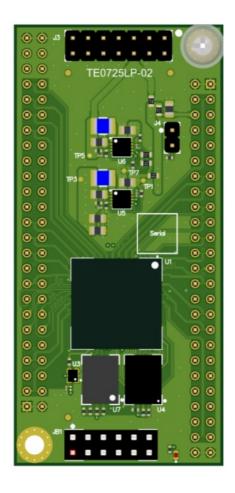
Home » trenz electronic » Trenz Electronic TE0725LP System On Modules User Manual 📆

#### Contents [ hide ]

- 1 Trenz Electronic TE0725LP System On Modules
- 2 Specifications
- 3 Product Information
- 4 Legal Disclaimer
- 5 Changes List
- 6 System Overview
- 7 Power-On Sequencing
- 8 FAQS
- 9 Documents / Resources
  - 9.1 References



**Trenz Electronic TE0725LP System On Modules** 





#### **Specifications**

Title: Legal Notices Modules

Number: TE0725LP 72C-AU

Date: 2023-07-14

Copyright: Trenz Electronic GmbH

Filename: Legal Notices Modules.SchDoc

#### **Product Information**

The TE0725LP module is designed and manufactured by Trenz Electronic GmbH. It
features an Xilinx Artix-7 FPGA, XADC, SPI\_SCK, JTAG, Serial Flash, UART,
HyperRAM, and various IOs/LVDS pairs. The module includes several enhancements
and modifications for improved performance and functionality.

## **Legal Disclaimer**

 It is important to note that the schematics and documentation provided with the TE0725LP module are protected under copyright. Reverse engineering or recreating the design, even with modifications, is strictly prohibited. The materials are intended for informational purposes only.

#### **Changes List**

 The TE0725LP module has undergone several revisions with enhancements such as component replacements, additions, and modifications. Refer to the latest revision changes document for the information on the updates.

#### **System Overview**

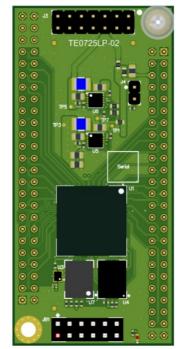
 The TE0725LP module has a comprehensive system overview detailing the components, interfaces, and connections of the FPGA module. Familiarize yourself with the system architecture to understand the functionalities of different elements.

### **Power-On Sequencing**

For proper operation, ensure that the voltage input (VIN) is set to 3.3V. The module
includes various power rails such as VCCIO35, VCCIO34, VCCINT, and VCCBRAM.
 Follow the specified power-on sequencing to ensure correct power distribution within
the module.

Regarding the usage of our schematics and similar documentation for the Trenz module TE0725LP.

- The project is protected under copyright, and we strongly and strictly prohibit reverse
  engineering or recreation, even if the design is just adapted or modified. TE0725LP is
  protected under such right, and in case of plagiarism, we will have to do anything
  necessary in order to protect our assets.
- Schematics and other handouts serve for informational purposes only!







Title: Legal Notices Modules						
A4	Number: 7	Number: TE0725LP 72C-AU				
Date:	2023-07-14	Page 1 of 12				
Filename: Legal Notices Modules.SchDoc						

REV	Description	
-01	Initial revision	
-02	1. L1 , L2 , L6 ferrit beads BKP0603HS121-T replaced with MPZ0603S121HT000.  2. Added J4 and R30 (JTAG only Enable).  3. Added Diode D1 for INIT reset.  4. Added Diode D3 for U8 input protection.  5. Added a pull-up resistor R29 on U7B RESET, pin A4.  6. Added a pull-up resistor R31 on SPI_DQ2, pin C4.  7. Added capacitor C22 to avoid false resetting.  8. Resistors R13 , R72 , R29 , R18 , R20 , R31 , R21 , R3 , R9 value 5.6kOhms changed to 2.2kOhms.  9. Resistors R4 , R15 value 2kOhms changed to 330Ohms according to AMD specification (UG470).  11. Added a 2.4 kOhm resistor R32 .  12. Capacitor C21 value 47 uF changed to 100 uF, added additional decoupling capacitors C33 , C34 , C35 according to AMD specification (UG 483).  13. Added C24 to improve noise immunity.  14. AVCC power rail filter is improved. C1 connected to 1.8V.  15. Added pages Legal notices, power diagram.  16. Added System Overview.  17. Added testpoints TP1 - TP15 .	VG (05.08.2024)



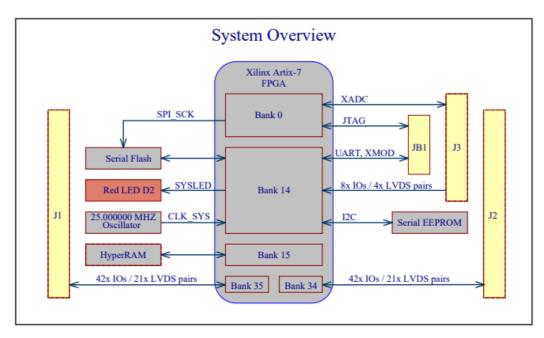
	Title:	E0725LP	- Changes list			
	A4		TE0725LP 72C-AU	Rev. 02		
	Date:	2023-07-14	Copyright: Trenz Electronic GmbH	Page2 of	12	
Filename:		e:	Revision_Changes.SchDoc			

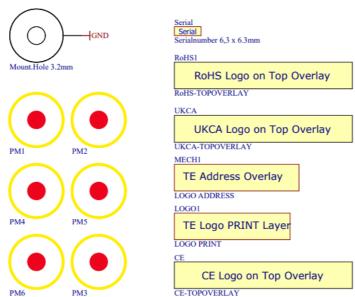
U\_FPGA\_PWR\_MISC FPGA\_PWR\_MISC.SchDoc

Power\_Diagram

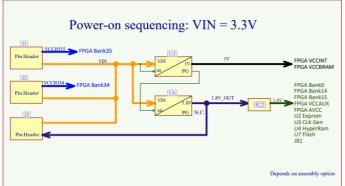
Power Diagram.SchDoc

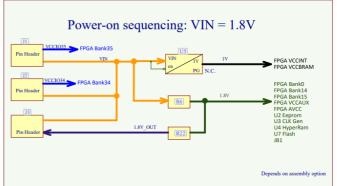
U\_PowerSupply POWER.SchDoc









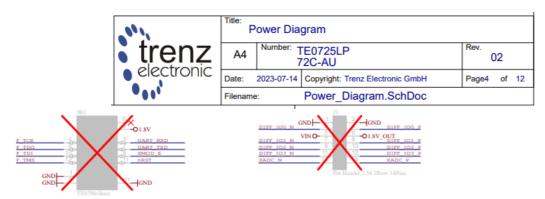


## Supported Voltage Ranges:

Power Rail	Direction	Range	Tolerance	Description	Note
VIN	IN	3.3V / 1.8V	+/-3%	Micromodule Power	J1, J2, J3
1.8V_OUT	OUT	1.8V	+/-3%	Power supply for external use	J3
VCCIO35	IN	1.8V 3.3V	+/-3%	Power of Bank 35	Л
VCCIO34	IN	1.8V 3.3V	+/-3%	Power of Bank 34	J2

Programmable Logic, supplied by power rail Low-Power Domain, supplied by power rail

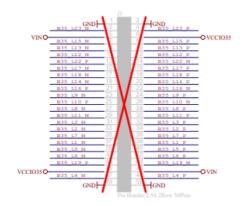


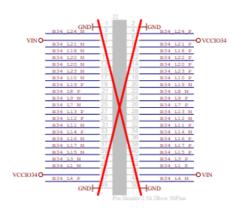




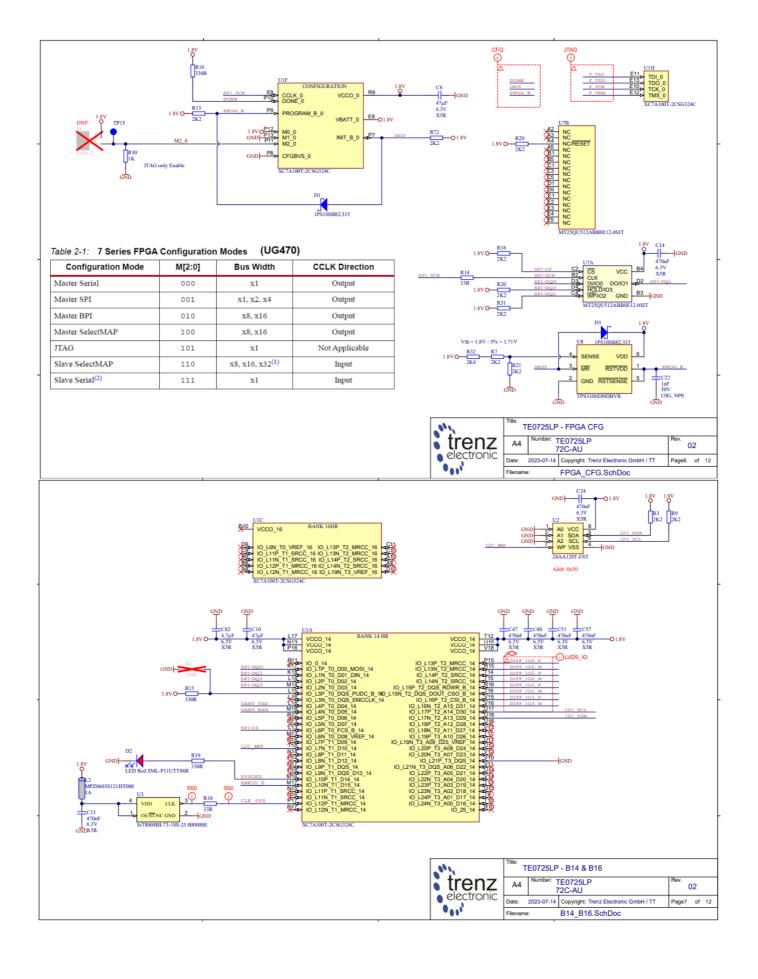
- TP10

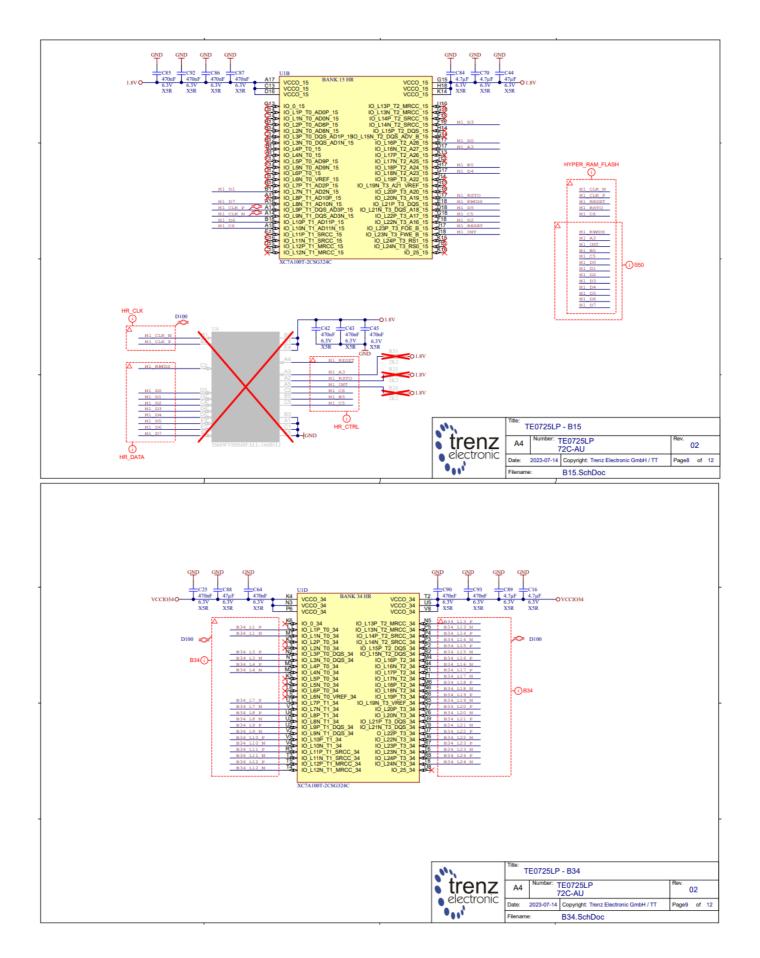
TP11 TP12

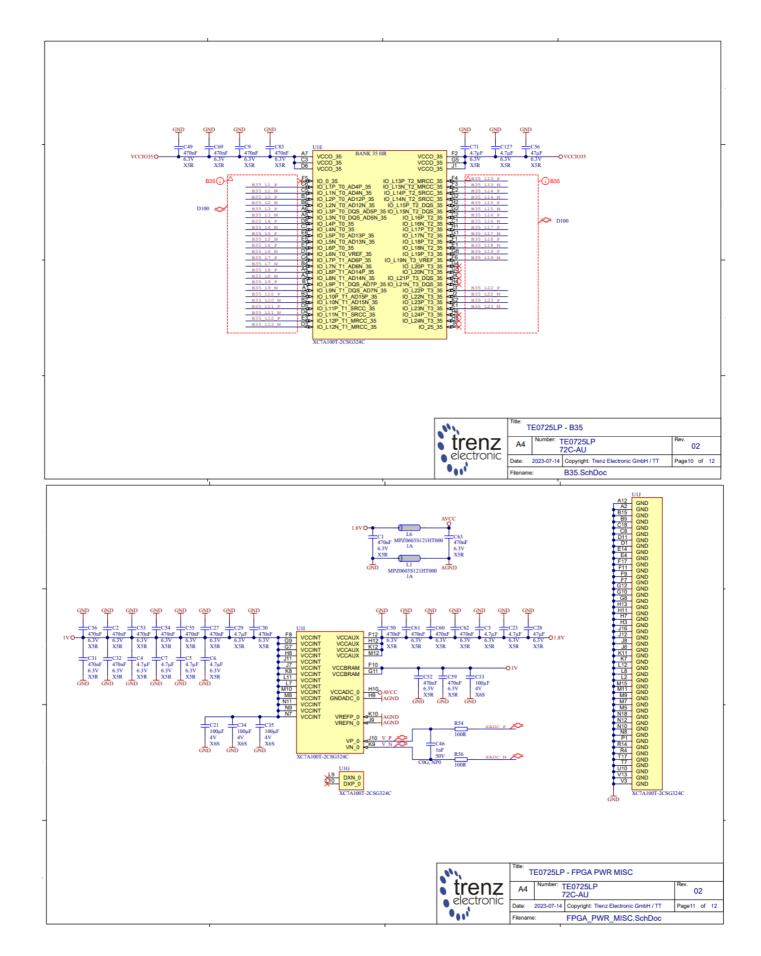


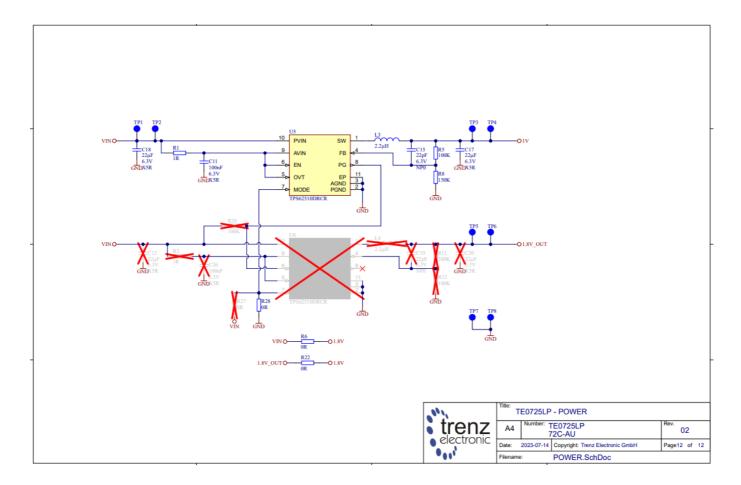


40%	TE0725LP - B2B Connectors					
trenz	A4		TE0725LP 72C-AU	Rev.	)2	
electronic	Date:	2023-07-14	Copyright: Trenz Electronic GmbH / TT	Page5	of	12
•00'	Filename	90	B2B_Connector.SchDoc			
electronic	Date:	2023-07-14	72C-AU  Copyright: Trenz Electronic GmbH / TT		)2 of	12









#### **FAQS**

Can I modify the design of the TE0725LP module?

: No, the design of the TE0725LP module is protected under copyright, and any form of reverse engineering or recreation is strictly prohibited.

How can I stay updated on revisions and changes to the module?

: Refer to the revision changes document provided by Trenz Electronic GmbH to stay informed about any modifications or enhancements made to the TE0725LP module.

# **Documents / Resources**



# Trenz Electronic TE0725LP System On Modules [pdf] User Manual TE0725LP, 72C-AU, TE0725LP System On Modules, TE0725LP, System On Modules, Modules

#### References

•	<u>User Manual</u>		

■ trenz
Tenz
<p

# Leave a comment

Your email address will not be published. Required fields are marked\*

Comment\*

Name

Email

Website

 $\hfill \square$  Save my name, email, and website in this browser for the next time I comment.

**Post Comment** 

Search:

# e.g. whirlpool wrf535swhz

Search

#### Manuals+ | Upload | Deep Search | Privacy Policy | @manuals.plus | YouTube

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.