

EVMK2E Known Issues

SR No#	Issue Detail	Affected Board Version No.	Resolved Board Version No.
1	USB Supply Issue	EVM v 1.0.2.0	EVM v 1.0.2.1 (Beta) and onwards
2	CP2105 (USB to Dual UART Convertor) Serial COM ports does not work when inserted into AMC chasses	EVM v 1.0.2.0	EVM v 1.0.2.1 (Beta) and onwards
3	SATA detection Issue	EVM v 1.0.2.0 and EVM v 1.0.2.1	EVM v 1.0.2.2 and onwards
4	Leakage voltage at VCC3V3 Aux line generated when EVM inserted in AMC chassis.	EVM v 1.0.2.0, EVM v 1.0.2.1 and EVM v 1.0.2.2	EVM v 1.0.3.0 onwards
5	USB 3.0 Link Error Issue	EVM v 1.0.2.0, EVM v 1.0.2.1, EVM v 1.0.2.2 and EVM v 1.0.3.0	EVM v 1.0.3.1 onwards
6	USB 3.0 Software Patch for EVM v 1.0.3.1	EVM v 1.0.3.1	
7	XDS200 Firmware Issue	EVM v 1.0.2.0, EVM v 1.0.2.1, EVM v 1.0.2.2, EVM v 1.0.3.0 and EVM v 1.0.3.1	

1. USB Supply Issue

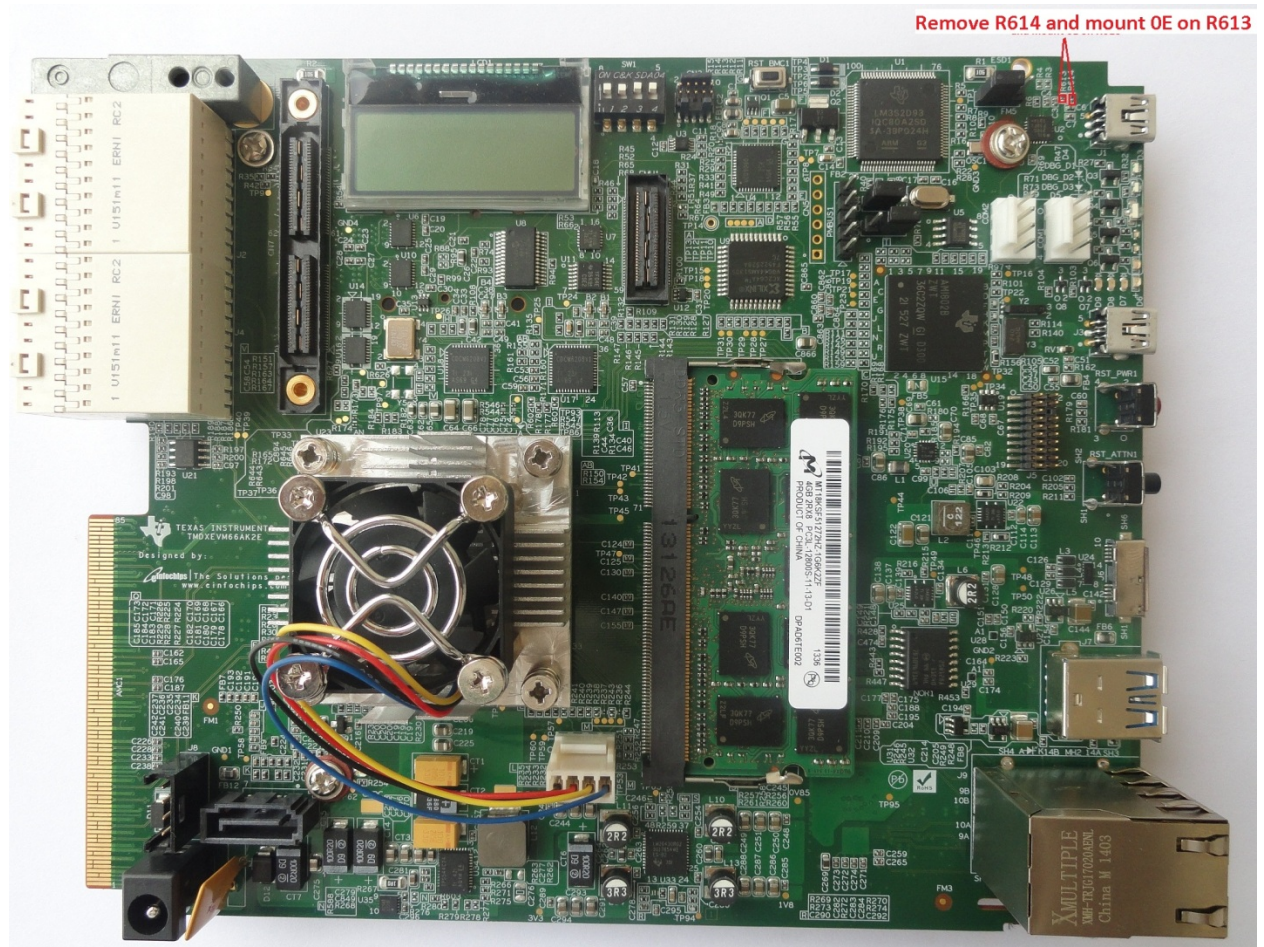
In Alpha boards (EVM v 1.0.2.0) TPS22913 Enable signal (USB_VBUS_EN) not provided in V01 UCD9090 configuration. Please update latest UCD9090 XML File (XML v2 or higher) from below link.

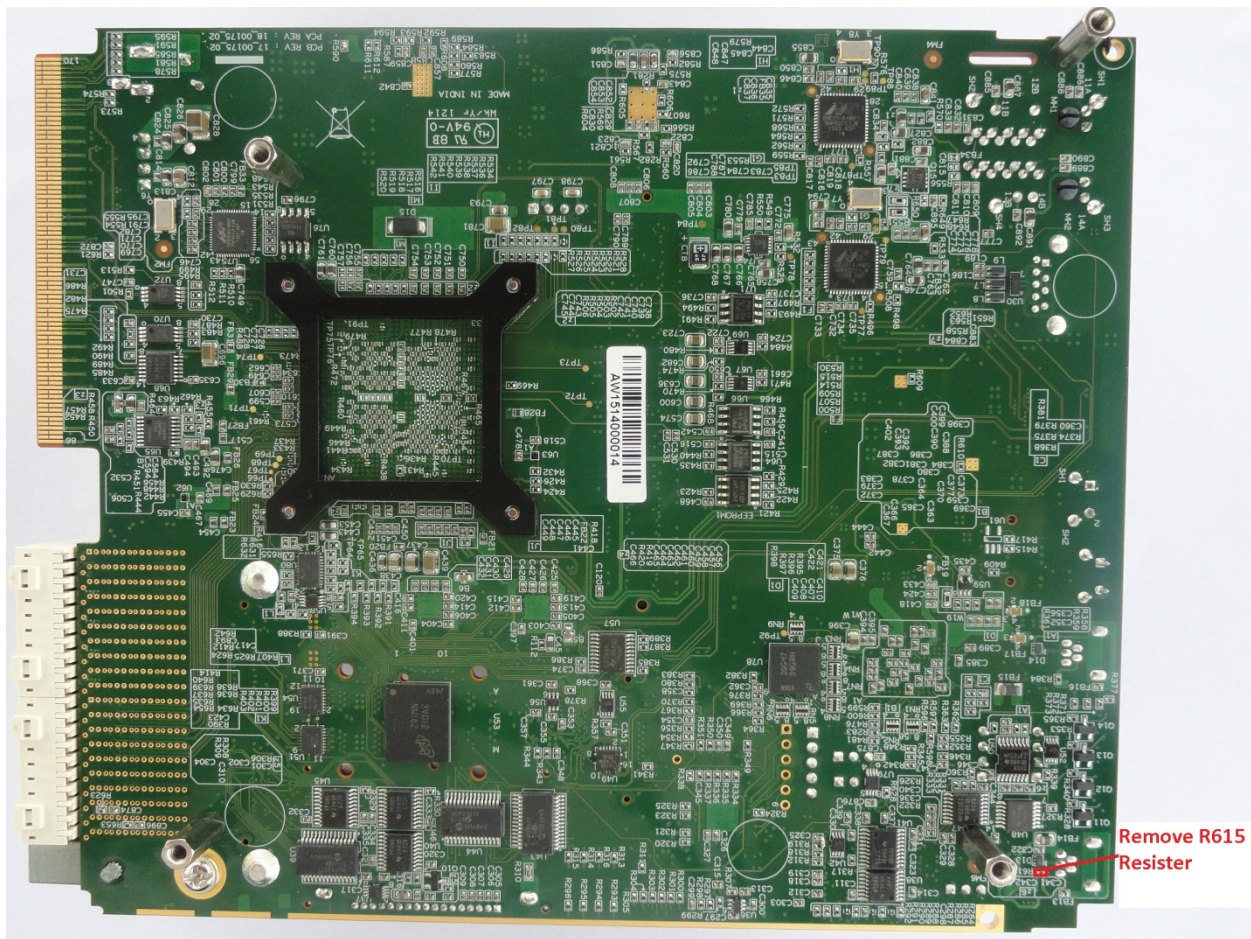
<https://www.einfochips.com/index.php/partnerships/texas-instruments/k2e-evm.html#5-resources>

This issue is resolved from EVM v 1.0.2.1 (Beta) and onwards.

2. CP2105 (USB to Dual UART Convertor) Serial COM ports does not work when inserted into AMC chasses

In Alpha boards (EVM v 1.0.2.0) version of K2E EVMs, CP2105 (USB to UART converter) was operated on "VCC3V3_AUX" supply, So you can not access serial port from USB with management power. To access serial port using USB there are few hardware modifications required. Please refer below images for hardware modifications.



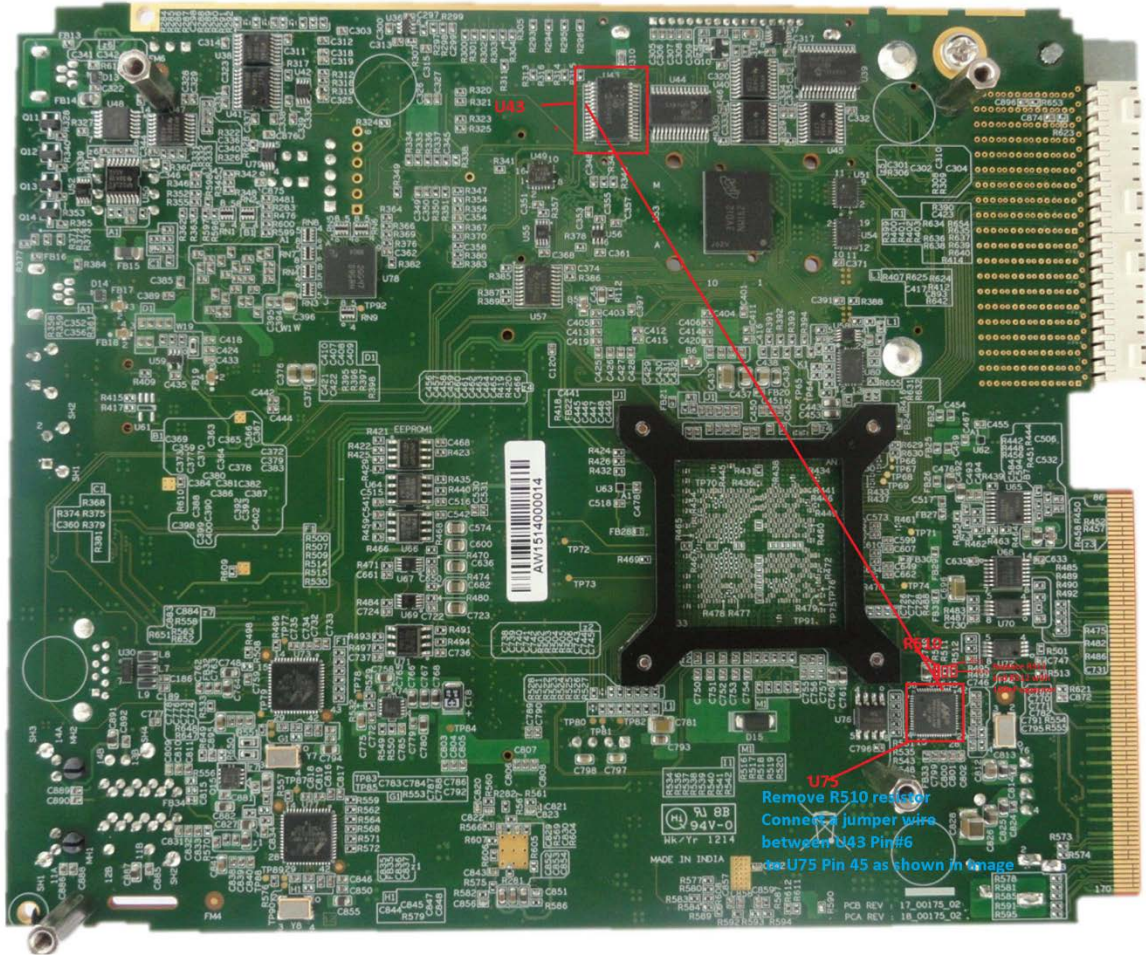


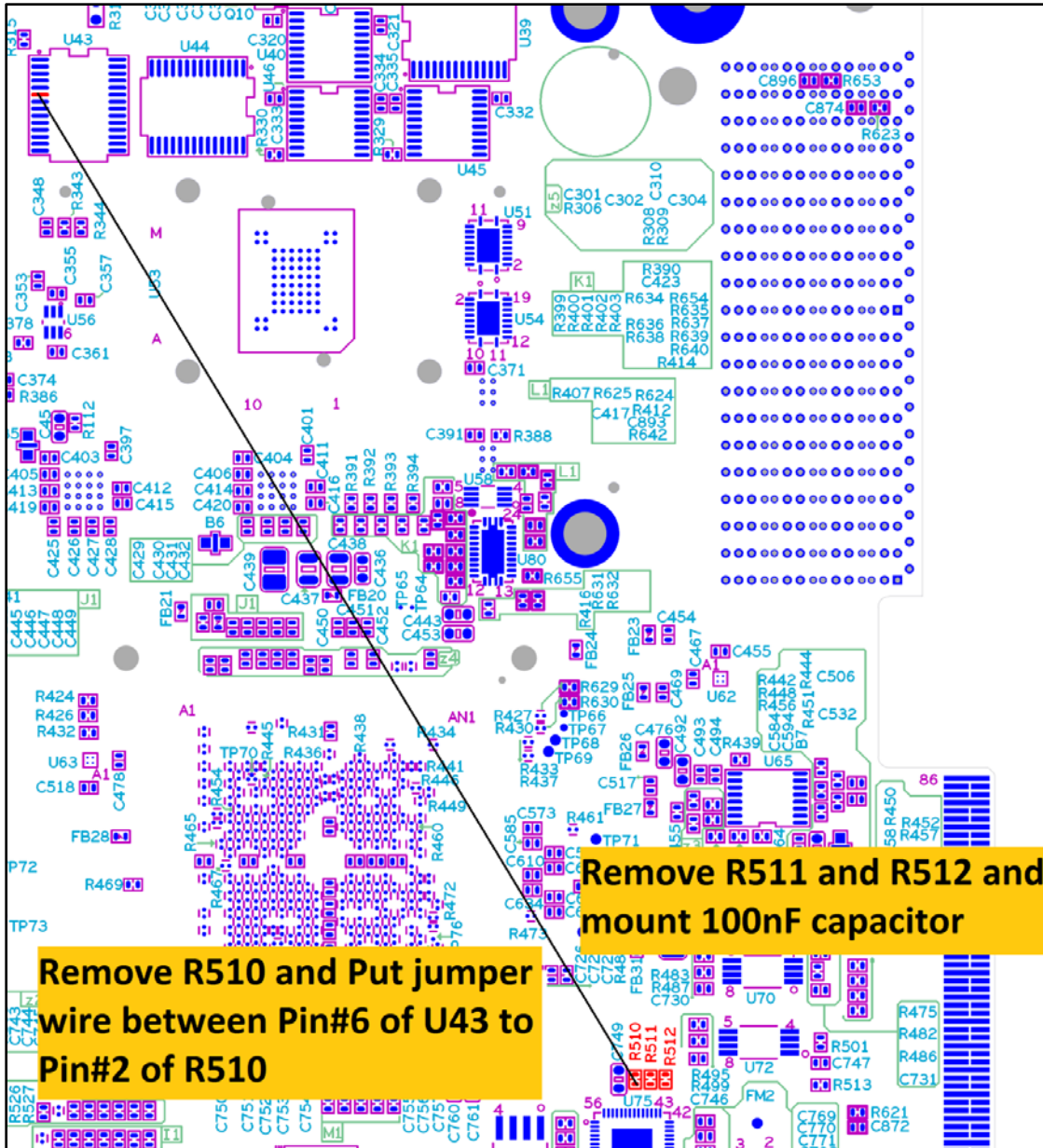
Remove R615
Resistor

3. SATA detection Issue

In Alpha & Beta (EVM v 1.0.2.0 and 1.0.2.1) version of EVMs are not supported to SATA devices. Please remove R510 and put a jumper wire between Pin#6 of U43 to Pin#2 of R510 as shown in below Image. Please replace R511 and R512 with 100 nF capacitors as shown in below Image.

This issue is resolved from EVM v 1.0.2.2 (Beta) and onwards.





4. Leakage voltage at VCC3V3_Aux line generated when EVM inserted in AMC chassis.

All versions of EVM, We have observed 0.95V Leakage on VCC3V3_AUX power rail during VCC_3V3_MP power is present.

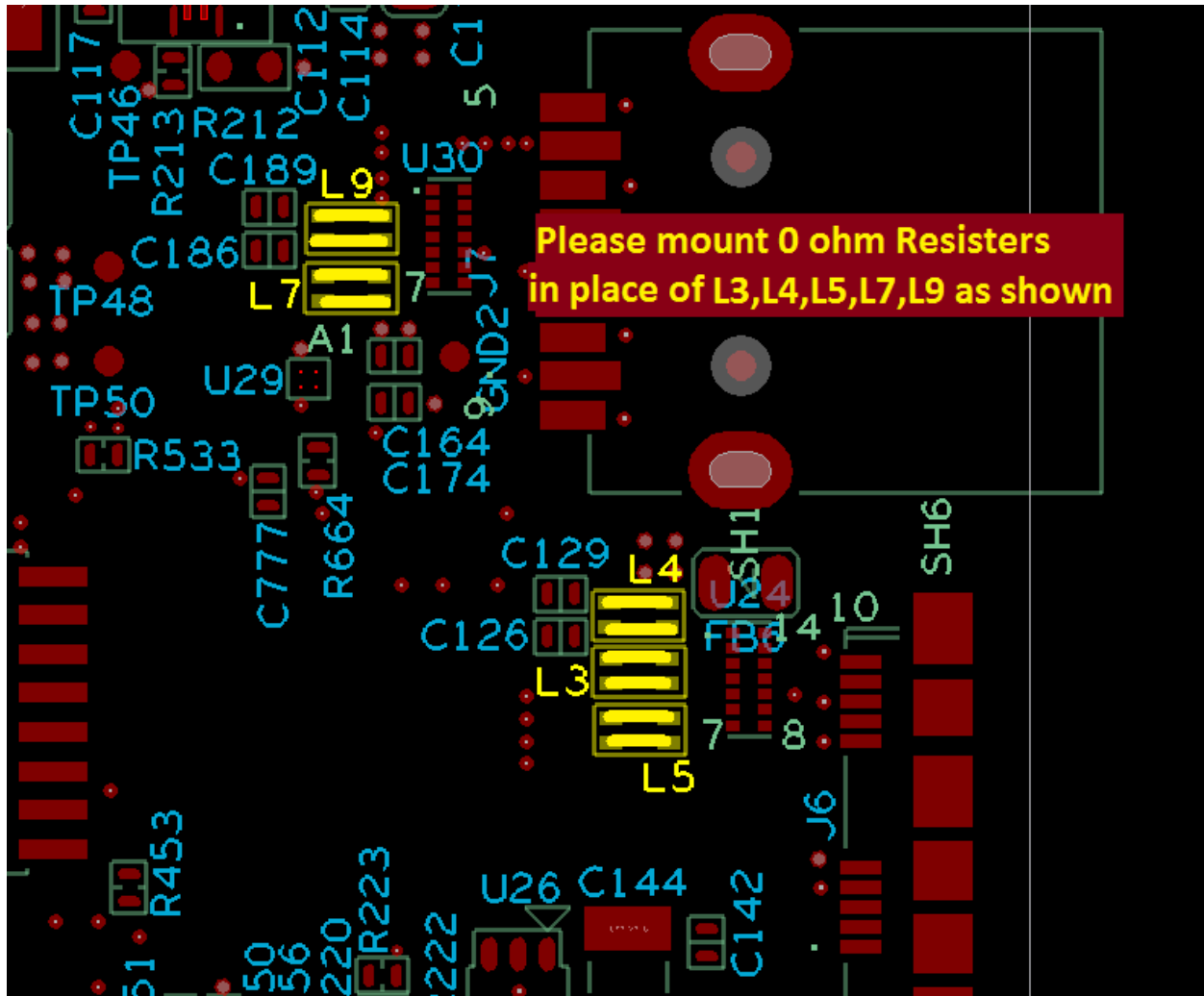
Please update latest Board Management Controller Binaries (BMC v. 1.1.0.5 or higher) Source Code from below link.

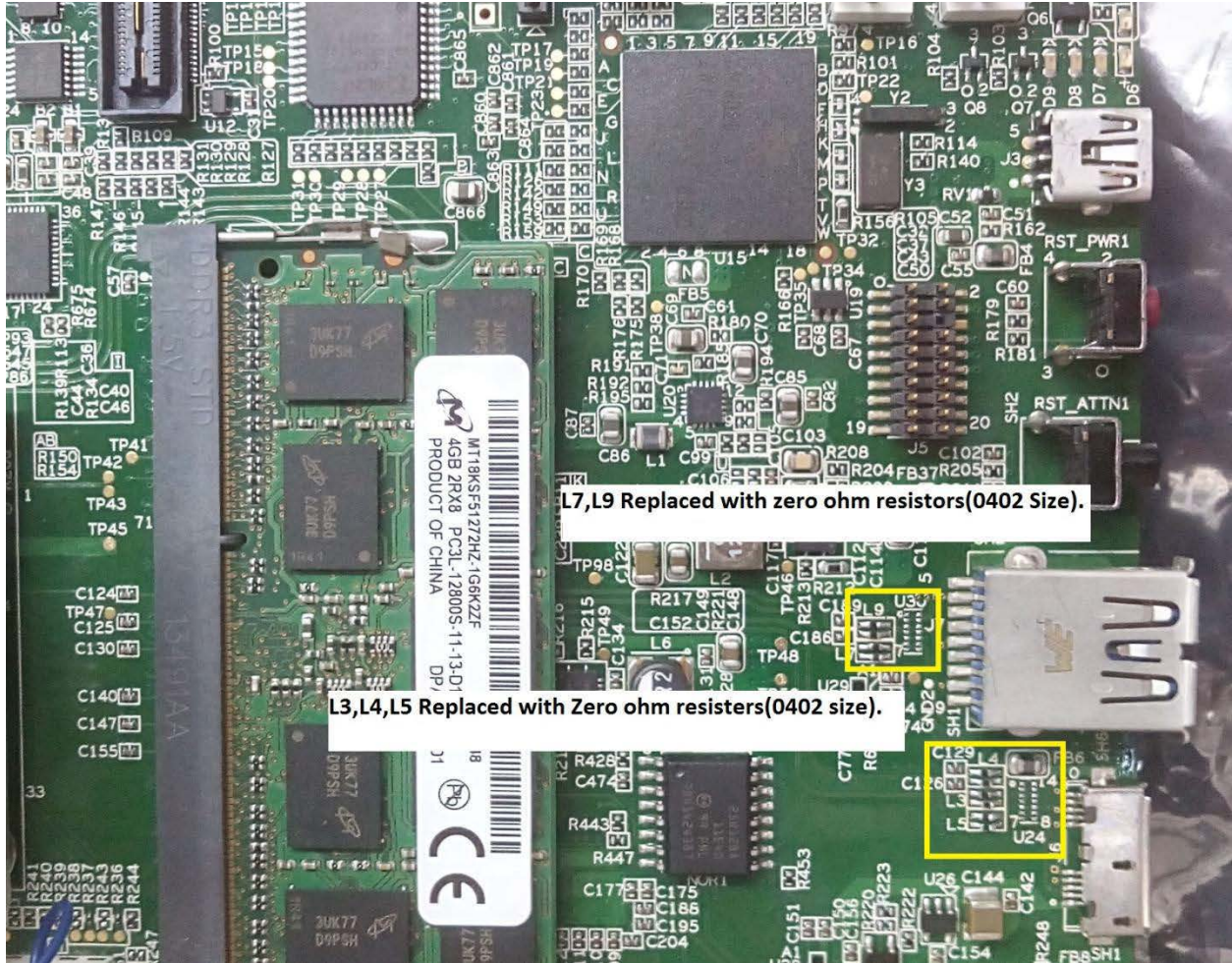
<https://www.einfochips.com/index.php/partnerships/texas-instruments/k2e-evm.html#5-resources>

5. USB 3.0 Link Error Issue.

We have observed USB 3.0 link errors on K2E EVM board using USB protocol analyzer tool. EVM v 1.0.2.0, EVM v 1.0.2.1, EVM v 1.0.2.2 and EVM v 1.0.3.0 versions of EVMs are affected by USB link Issue. Both USB 3.0 ports of EVMs are affected by link error issue. These links errors point to some USB signal integrity issues on K2E and are causing issues in the driver functionality. Please find related hardware changes as below.

Please mount zero ohm resistors (0402 size) in place of L3,L4,L5,L7,L9 at (top side of board) as shown in below images.

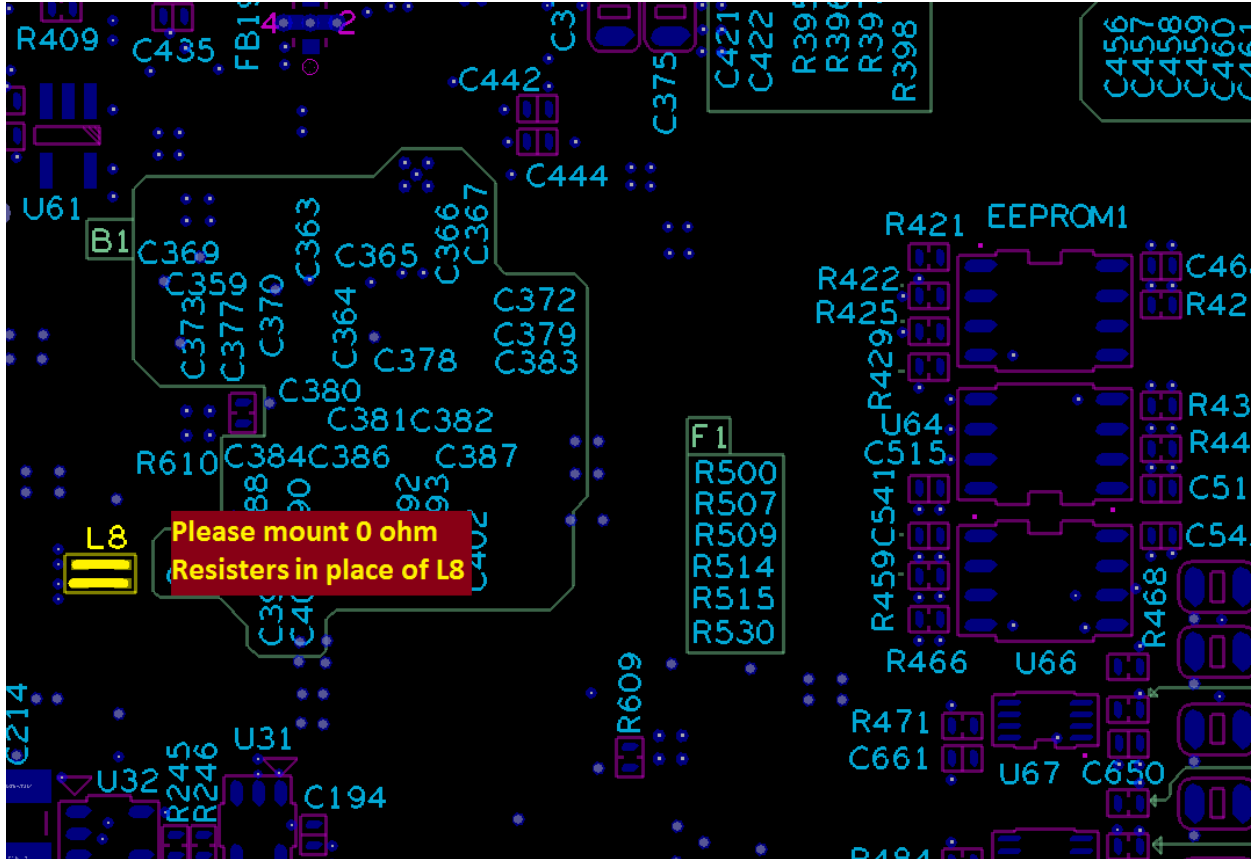




L7,L9 Replaced with zero ohm resistors(0402 Size).

L3,L4,L5 Replaced with Zero ohm resistors(0402 size).

Please mount zero ohm resistors (0402 size) in place of L8 (bottom side of board) as shown in below images.



6. USB 3.0 Software Patch for EVM v 1.0.3.1.

We have observed USB 3.0 link errors on K2E EVM. These are u-boot and kernel patch needed when running K2E EVM Rev 1.0.3.1 for 1.4GHz speed.

Uboot patch:

https://www.einfochips.com/images/texas_instrument/K2EEVM/0001-Correct-1.4GHz-configuration.patch.zip

Kernel patch:

https://www.einfochips.com/images/texas_instrument/K2EEVM/0001-Fix-UART-clock-due-to-1.4GHz-configuration-correctio.patch.zip

7. XDS200 Firmware Issue.

Note that the firmware update is not required. The user can choose to continue using the XDS200 emulator without the firmware update. But the user would have to make the choice each and every time a Target Configuration is launched.

The firmware update is provided to improve interoperability of the USB driver in the firmware. Therefore, special care needs to be used to guarantee success with the firmware update. If the firmware update fails, the EVM must be returned for repair.

The update is done via script and uses the supplied xds2xx_conf utility. Be sure the USB cable from the XDS200 emulator is plugged directly into the PC and not into an external USB hub before running the script. Also make sure

there are no other devices plugged into the same USB hub on the PC. Do not perform the firmware update from a machine running MAC OSX or Linux since there were compatibility problems discovered with these operating systems.