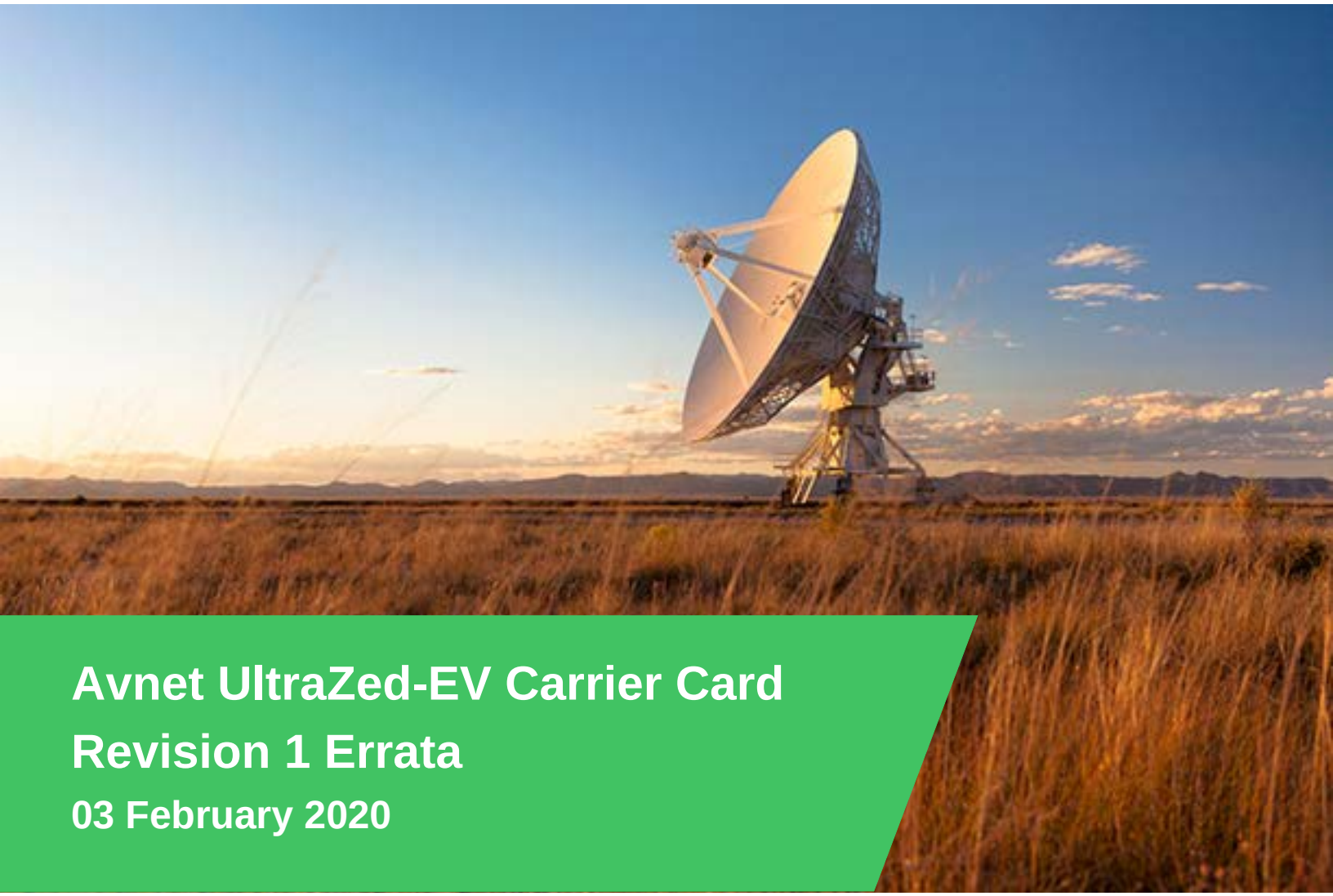


# Avnet UltraZed-EV Carrier Card Revision 1 Errata

## 03 February 2020

# Table of Contents

# 1 Introduction

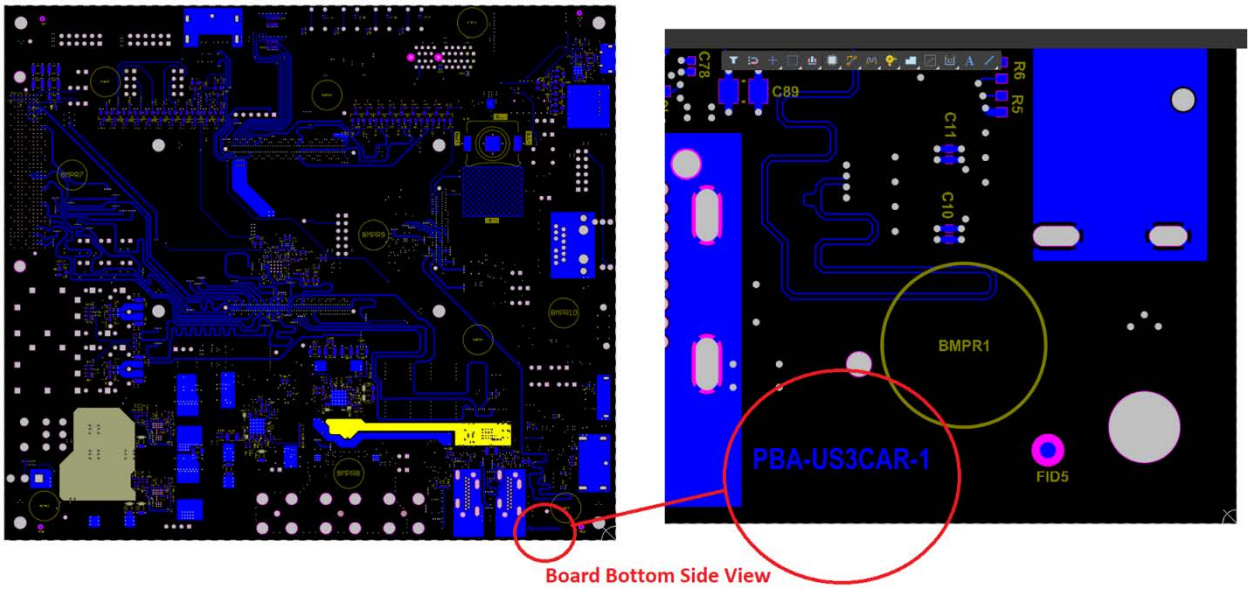
Thank you for your interest in the Avnet UltraZed-EV Carrier Card. Although Avnet has made every effort to ensure the highest possible quality, these kits and associated software are subject to the limitations described in this errata notification.

Be aware that any of the optional workarounds requiring physical modifications to the board are done at the User's own risk, and Avnet is not liable for poorly performed rework.

# 2 Identifying Affected Modules

The carriers affected by this errata can be identified by the PCB Name of the UltraZed-EV Carrier Card. The PCB Name of the UltraZed-EV Carrier Card is written in copper and can be found on the bottom side of the board near the edge on the backside to the RIGHT of the HDMI connectors along the same edge. This assumes you are looking at the BACK of the carrier card with the 3G-SDI connectors facing the direction depicted in the below figure.

The current production revision is "1-01-03". Any boards that are at this revision or earlier are affected. Any board with a "1" at the end of the string (PBA-US3CAR-1) is an affected board.



Board Bottom Side View

# 3 Errata

## 3.1 FMC Connector has incorrect clock placement

### 3.1.1 Applications Affected

Any FMC card that was designed to the Vita 57.1 2010 standard which requires the use of a clock on signals on pins G2/G3. These designated pins are used by some FMC cards for CLK1_M2C_P/N.

### 3.1.2 Description

The FMC connector, JX4x component has net names labeled and routing that is not consistent with the Vita spec. and therefore are not Vita spec. compliant. The following pins are affected and will be changed on a new revision of the board.

- JX4B1, JX4B40
- JX4E37
- JX4G2, JX4G3
- JX4J2, JX4J3
- JX4K4, JX4K5

This leads to the following signals to not be connected, or to be connected to different locations in the FPGA pinout, or have erroneous circuitry associated with it. This can be seen by examining the Schematic Print PRJ-US3CAR-1-01-02 on page 9 and comparing against a known Vita57.1 specification.

Signals marked in RED are incorrect.

| | K | J | H | G | F | E | D | C | B | A |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | VREF_B_M2C | GND | VREF_A_M2C | GND | PG_M2C | GND | PG_C2M | GND | RES1 | GND |
| 2 | GND | CLK1_C2M_P | PRSNT_M2C_L | CLK0_C2M_P | GND | HA01_P_CC | GND | DP0_C2M_P | GND | DP1_M2C_P |
| 3 | GND | CLK1_C2M_N | GND | CLK0_C2M_N | GND | HA01_N_CC | GND | DP0_C2M_N | GND | DP1_M2C_N |
| 4 | CLK1_M2C_P | GND | CLK0_M2C_P | GND | HA00_P_CC | GND | GBTCLK0_M2C_P | GND | DP9_M2C_P | GND |
| 5 | CLK1_M2C_N | GND | CLK0_M2C_N | GND | HA00_N_CC | GND | GBTCLK0_M2C_N | GND | DP9_M2C_N | GND |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 37 | HB17_P_CC | HB18_N | LA32_P | LA33_N | HB20_P | | GND | 12P0V | DP6_C2M_N | GND |
| 38 | HB17_N_CC | GND | LA32_N | GND | HB20_N | GND | 3P3V | GND | GND | DP5_C2M_P |
| 39 | GND | VIO_B_M2C | GND | VADJ | GND | VADJ | GND | 3P3V | GND | DP5_C2M_N |
| 40 | VIO_B_M2C | GND | VADJ | GND | VADJ | GND | 3P3V | GND | GND | GND |

### 3.1.3 Workaround

As we cannot account for every FMC compatible or FMC certified board, a customer should first determine if the signalling cannot be worked around with a customized circuit design,that is a COTS FMC card is being used, the customer should contact their local Field Applications Engineer (FAE) or sales team for help rectifying the issue.

### 3.1.4 Identifying Repaired or New Boards

The earliest next revision of this board will be “2-01-00”. Using the same identifying techniques listed above in “Identifying Affected Modules,” any board that begins with “2” or greater will have the PCB copper correction. These boards will be easily identified by the metal on the bottom side of the PCB that reads “PBA-US3CAR-2”

# 4 New Erratum

Any new erratum found will be posted to the UltraZed-EV Carrier Card product page, under the Technical Documents tab:

http://avnet.me/UZEVEVCC_E14

# 5 Additional Support

For additional support, please review the discussions and post your questions in the UltraZed-EV Forum:

http://avnet.me/uzevforum

You may also contact your local Avnet FAE.

# 6 Revision History

| Date | Version | Revision |
|---|---|---|
| 03 Feb 2020 | 1.0 | Added Items 3.1 |