To Our Valued Customers,

This PCN affects our iMX8M Mini uCOM board (product number: EAC00336 and EAC00349).

The 100MHz PCIe clock inputs have had incorrect termination on some early board revisions. There are 50 ohm termination resistors to ground close to the clock inputs to the iMX8M Mini processor. The clock inputs on the processor already have internal 50 ohm termination resistors so the external termination resistors will in effect half the clock signal amplitude and hence lower noise margins on the PCIe interface.

No customers have reported any issue, since the margins are very good to start with, but we recommend removing the termination resistors to improve margins.

The rework is simple and done on the top side of the board, see picture below. First identify the B-corner on the iMX8M Mini uCOM board. Then identify the termination resistors that shall be removed.

[Image of a circuit board with highlighted areas indicating the B-corner and the resistors to be removed.]
The picture below illustrates a more detailed view of the resistors to remove.

Identification
The correction (removing the termination resistors) will be done on boards produced after January 2022. All boards from Embedded Artists have a board revision marking on the top side, between the processor and LPDDR4 memory. **Rev PA7, A and A1 are affected.** Rev A2 and higher (rev B1, rev B2, etc) are not affected.

Kind Regards,
Embedded Artists AB
January 26th, 2022