

# i.MX35 PDK CPU Card Noncompliant Power Up Sequence

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## 1 Issue and Scope

The power-up sequence as implemented on all i.MX35 Product Development Kit CPU cards, does not comply with the recommendation for power up sequencing described in the i.MX35 Data Sheet, *i.MX35 Applications Processors for Industrial and Consumer Products* (MCIMX35SR2CEC).

## 2 Description

The i.MX35 power up sequence on the i.MX35 CPU card does not fully comply with the i.MX35 Data Sheet recommendation because the i.MX35 CPU card was designed and fabricated before the power up recommendations were finalized and published.

Specifically, the OSC24M\_VDD and OSC\_AUDIO\_VDD power pins of the i.MX35 are ganged together and connected with the CPU\_3V15 power supply on the CPU card. This connection applies power to the oscillators of the i.MX35 prematurely, violating the sequence recommended in the data sheet.

## 3 Recommendations

No workaround is possible to correct the power up sequence on the i.MX35 CPU card because the traces for the oscillator power supplies are buried in the inner layers of the board.

System designers should connect the OS24M\_VDD and OSC\_AUDIO\_VDD such that power is applied at the correct time during the power up sequence recommended by the i.MX35 Data Sheet. The power up scheme of the i.MX35 CPU card should not be copied exactly.

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