

Introduction

This document describes the hardware difference when converting from the L series Framer+LIU combo chips to the VL series. The changes in this document affect the following devices:

- a. Moving from the XRT86L32 to the XRT86VL32
- b. Moving from the XRT86L34 to the XRT86VL34

1.0 Inner Core Pins (1.8v)

The table below is a summary of power pin connections for the XRT86VL32/VL34 devices that require 1.8v. In the previous versions of the XRT86L32/L34, these pins were designated as 3.3v power pins.

1.8v Power Pins	Pin Number	Description
DVDD18	B8, C4, J16, R13, U7	Digital Supply for LIU
AVDD18	A2	Analog Supply for LIU
VDDPLL18	B1, C2, D2, D3	Analog Supply for PLL

2.0 TMS (Test Mode Select) JTAG Pin

In the XRT86L32/L34 family, it was recommended that the TMS pin be pulled "Low" for normal operation. For the XRT86VL32/VL34 family, this pin must be pulled "High" for normal operation.

3.0 Device ID

The Device ID is unique to each device. Therefore, the XRT86L32, XRT86VL32, XRT86L34, and the XRT86VL34 all have unique Ids.