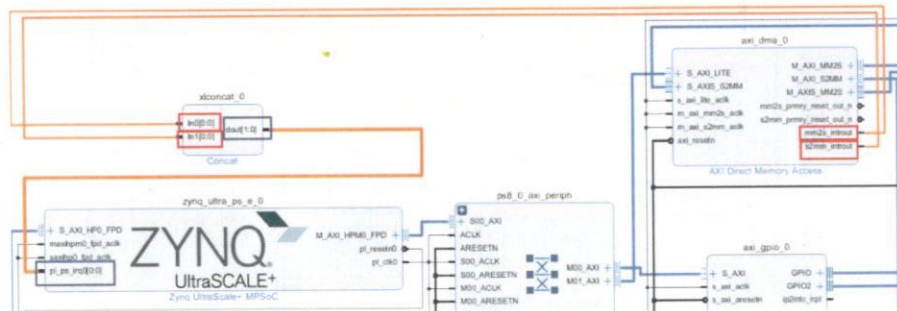


### Add Concat IP & Bus Connection (AXI DMA Interrupt)

**NAR Labs**

发射 pulse, 接收 Tx, Rx



pl\_ps\_irq: AXI DMA Interrupt

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Interrupt Handler (SDK ; for ref.)

**NAR Labs**

system.hdf system.mss main.c exi\_dma.c asm\_vectors.S

AXI DMA TX interrupt handler

```
static void TxIrHandler(void *callback)
{
    u32 IrqStatus;
    int Timeout;
    KxIdma *AxIdmaInst = (KxIdma *)callback;

    /* Read pending interrupts */
    IrqStatus = KxIdma_IntrGetIrq(AxIdmaInst, KXIDMA_DM)

    /* Acknowledge pending interrupts */

    KxIdma_IntrAckIrq(AxIdmaInst, IrqStatus, KXIDMA_DMA)

    /*
     * If no interrupt is asserted, we do not do anything
     */
    if (!((IrqStatus & KXIDMA_IRQ_ALL_MASK) != 0)) {
        return;
    }

    /*
     * If error interrupt is asserted, raise error flag,
     * software to recover from the error, and return with
     * processing.
     */
    if (((IrqStatus & KXIDMA_IRQ_ERROR_MASK) != 0)) {
        Error = 1;
    }
}
```

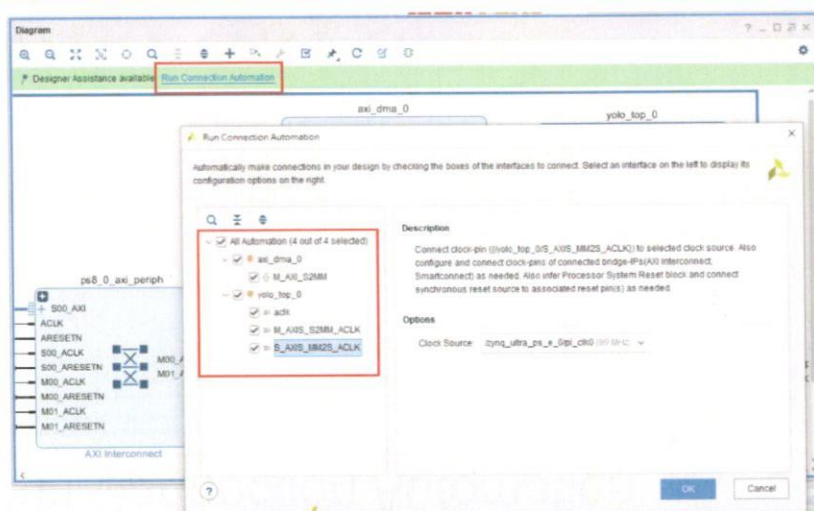
```

1 system.hdf | 2 system.mss | 3 main.c | 4 axi_dma.c | 5 asm_vectors.S
+
+=====
+static void RxIntrHandler(void *Callback)
+{
+    u32 IrqStatus;
+    int TimeOut;
+    XAxiDma *AxiDmaInst = (XAxiDma *)Callback;
+
+    /* Read pending interrupts */
+    IrqStatus = XAxiDma_IntrGetIrq(AxiDmaInst, XAXIDMA_DEVICE_TO_DMA);
+
+    /* Acknowledge pending interrupts */
+    XAxiDma_IntrAckIrq(AxiDmaInst, IrqStatus, XAXIDMA_DEVICE_TO_DMA);
+
+    /*
+     * If no interrupt is asserted, we do not do anything
+     */
+    if (!(IrqStatus & XAXIDMA_IRQ_ALL_MASK)) {
+        return;
+    }
+
+    /*
+     * If error interrupt is asserted, raise error flag, reset the
+     * hardware to recover from the error, and return with no further
+     * processing.
+     */
+    if ((IrqStatus & XAXIDMA_IRQ_ERROR_MASK)) {
+
+        Error = 1;
+    }
+}
+=====

```

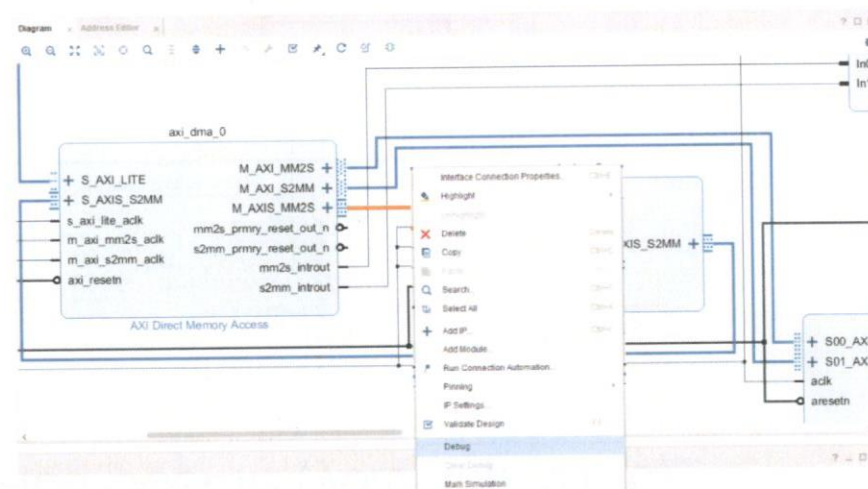
3

## Run Connection Automation

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## HW Debug(ILA)

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