TIVA LIBRARY-I2C

C:\ti\TivaWare\_C\_Series-2.2.0.295\examples\peripherals\i2c

master\_slave\_loopback

// Indicate the direction of the data.

//

UARTprintf("Tranferring from: Master -> Slave\n");

//

// Send 3 peices of I2C data from the master to the slave.

//

for(ui32Index = 0; ui32Index < NUM\_I2C\_DATA; ui32Index++)

{

//

// Display the data that the I2C0 master is transferring.

//

UARTprintf(" Sending: '%c' . . . ", pui32DataTx[ui32Index]);

//

// Place the data to be sent in the data register

//

I2CMasterDataPut(I2C0\_BASE, pui32DataTx[ui32Index]);

//

// Initiate send of data from the master. Since the loopback

// mode is enabled, the master and slave units are connected

// allowing us to receive the same data that we sent out.

//

I2CMasterControl(I2C0\_BASE, I2C\_MASTER\_CMD\_SINGLE\_SEND);

//

// Wait until the slave has received and acknowledged the data.

//

while(!(I2CSlaveStatus(I2C0\_BASE) & I2C\_SLAVE\_ACT\_RREQ))

{

}

//CODE STUCK ABOVE

// Read the data from the slave.

//

pui32DataRx[ui32Index] = I2CSlaveDataGet(I2C0\_BASE);

//

// Wait until master module is done transferring.

//

while(I2CMasterBusy(I2C0\_BASE))

{

}

//

// Display the data that the slave has received.

//

UARTprintf("Received: '%c'\n", pui32DataRx[ui32Index]);

}

I2C INTERRUPT MASK REGISTERS NOT CHANGING



