MODIFICATION RECOMMENDED

U9405A-02

S E R V I C E   N O T E

U9405A - i1000SFP systems

Serial Numbers: All

Current Digital card firmware version 06 does not support i2C/SPI "Read to File" function.

Parts Required:
Parts will be order directly from factory. Required parts and tools:

1. Lattice download cable
2. Lattice programming software tool
3. Digital Card firmware Version 07 (H_Code.jed and L_Code.jed)

Contact :
kwan-wee_lee@agilent.com
derek-cw_yu@agilent.com

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION RECOMMENDED		
ACTION [[]] ON SPECIFIED FAILURE CATEGORY: x AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours	

LOCATION   [[]] CUSTOMER INSTALLABLE
CATEGORY: x   ON-SITE **(active On-site contract required)**
             [[]] SERVICE CENTER
             [[]] CHANNEL PARTNER
	SERVICE [[]] RETURN
	INVENTORY: [[]] SCRAP
	             [[]] SEE TEXT
		USED [[]] RETURN
		PARTS: [[]] SCRAP
		             [[]] SEE TEXT

AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 4- March - 2016.	
[[]] Calibration Required X Calibration NOT Required	PRODUCT LINE: 80 AUTHOR: CW Yu	
ADDITIONAL INFORMATION: Order Parts directly from factory. Contact kwan-wee_lee@agilent.com or derek-cw_yu@agilent.com		

March 5, 2014

Agilent Technologies

Situation:
Current digital card firmware version 06 cannot support I2C/SPI "Read to file" function.
All data will be written as Zero in the bin file thus all of digital cards need to be upgraded to version 07.

Solution/Action:
Follow the below instructions to upgrade Digital Card Firmware to Version 07
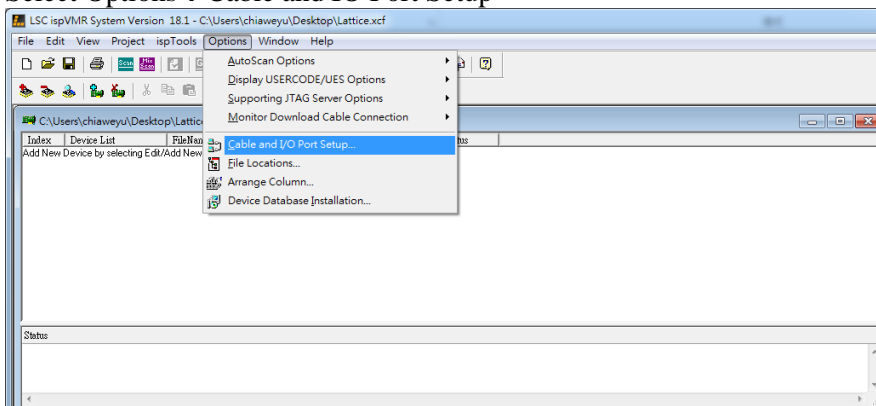
Installation of Lattice Programming Software
1. Run ispvmSystemV17.8.exe for installation
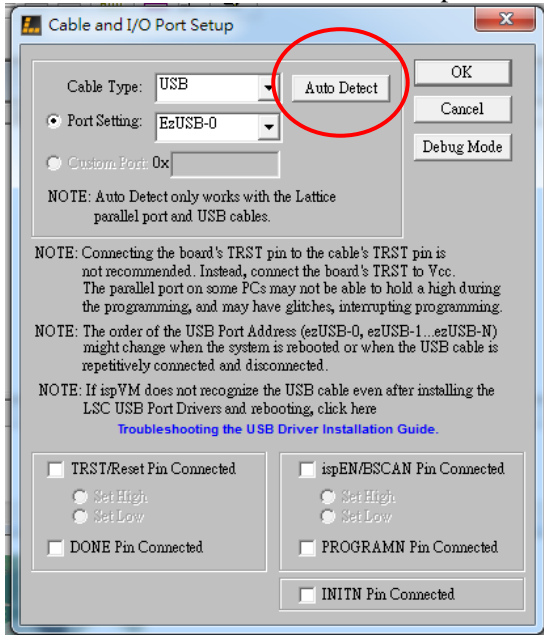2. Plug download cable to controller USB port

3. Double click ispvmSystem.

4. Setup IO port and cable.
    Select Options→Cable and IO Port Setup

5. Click "Auto Detect" for IO Port Setup and click "OK"

Connection of Download cable to Digital Card Low Channel IC

1. Turn off the i1000 system and remove the Digital Card.
2. Plug download cable to low channel connecter
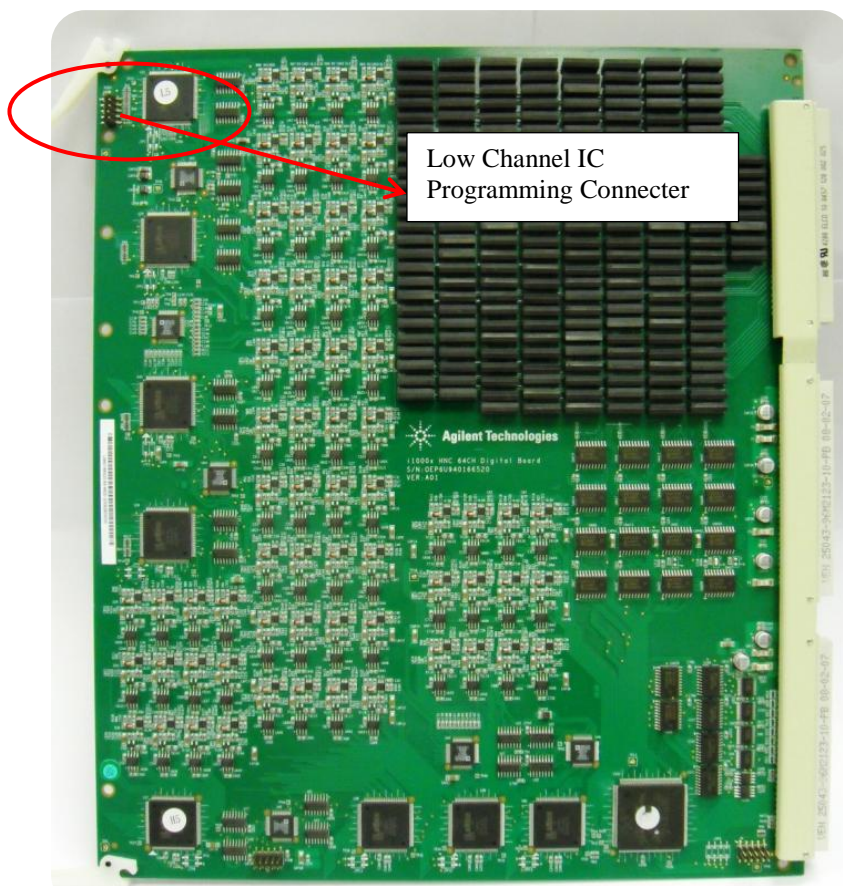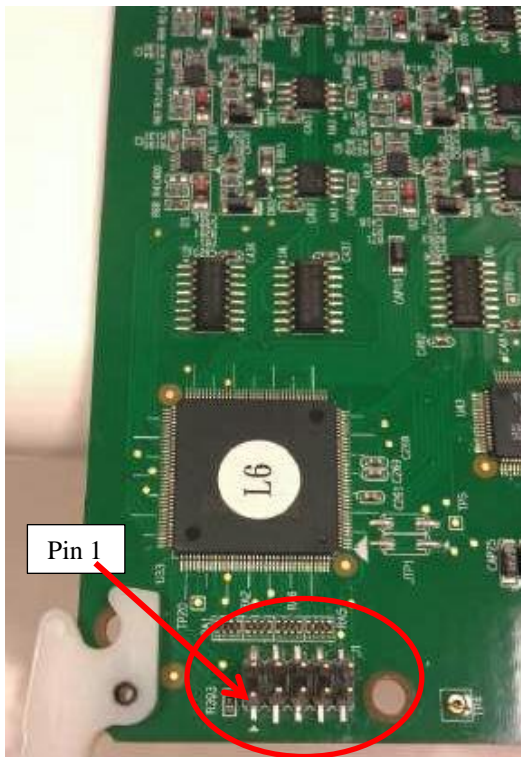
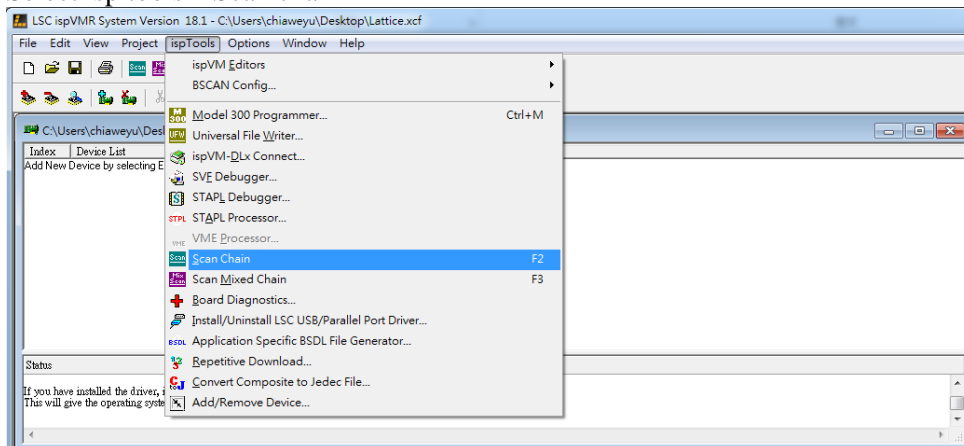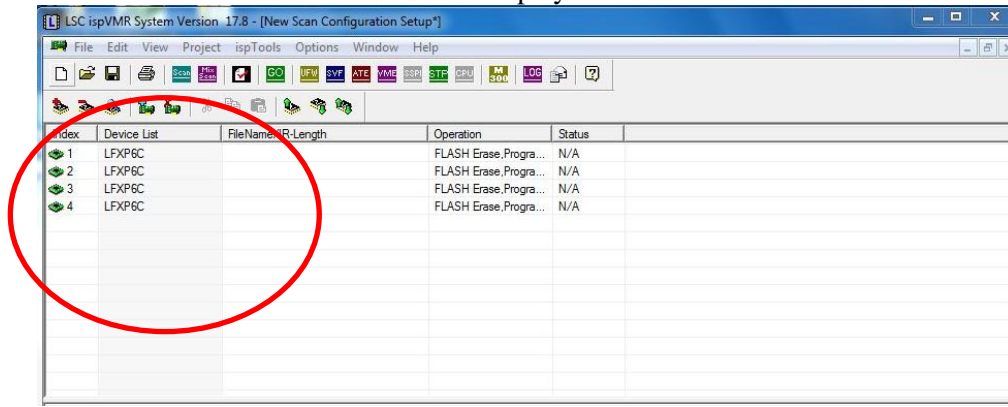

Low Channel IC
Programming Connecter

3. Insert Digital card in card cage with the Download cable attached to it.
4. Leave space to allow the Download cable to be placed into the cardcage. If needed, remove the adjacent pin cards.
5. Turn on i1000D system power

Program firmware to Low Channel ICs

1. Select isp tools→Scan chain
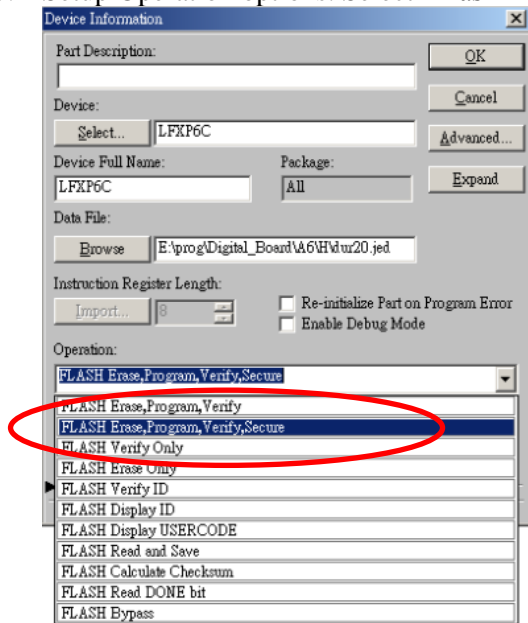
2. Low Channel IC will be detected and displayed

3. Load Firmware to program

Double click
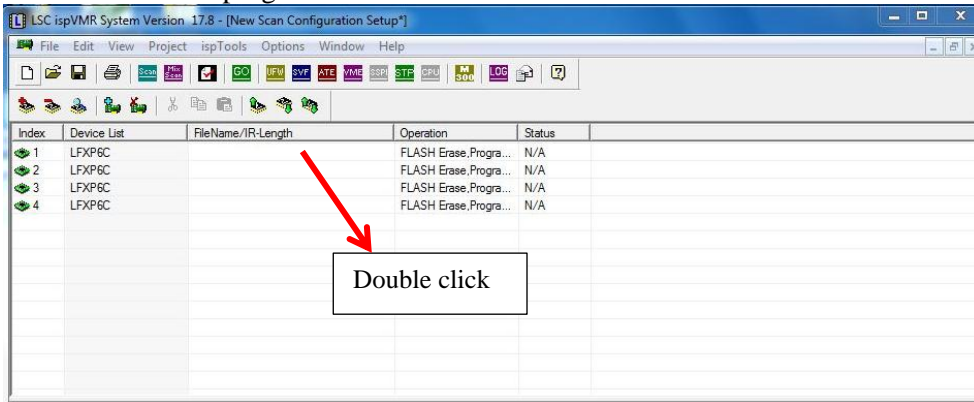
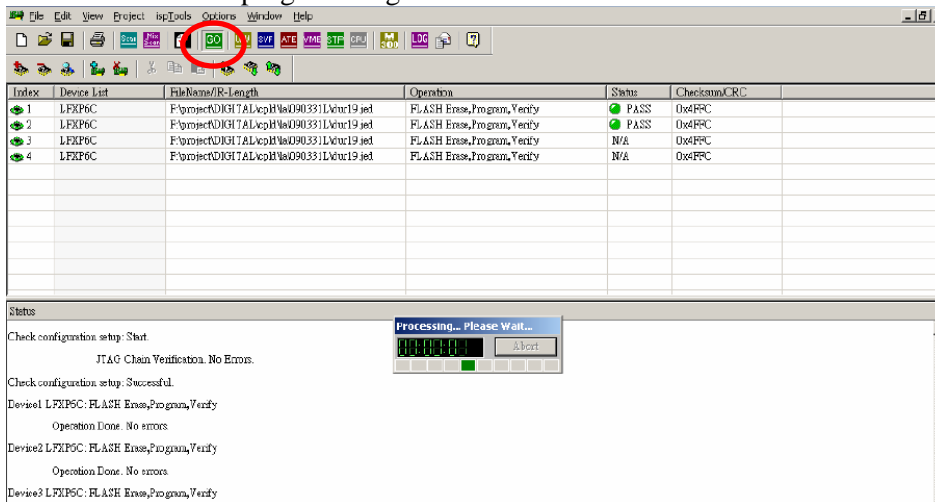4. Click Browse and select Firmware file "L_CODE.jed"
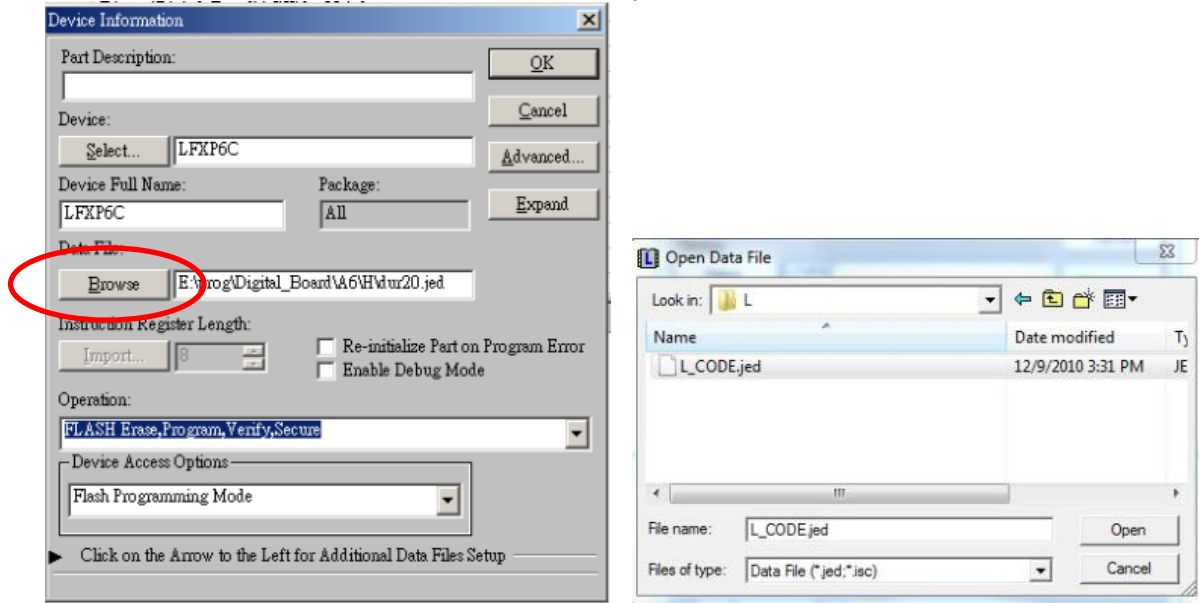
5. Setup Operation options. Select "Flash Erase, Program, Verify, Secure"
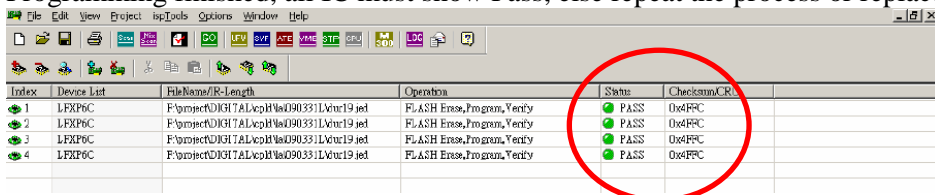

6. Repeat Step3 to 5 to complete the setup for the rest of the Low Channel IC.
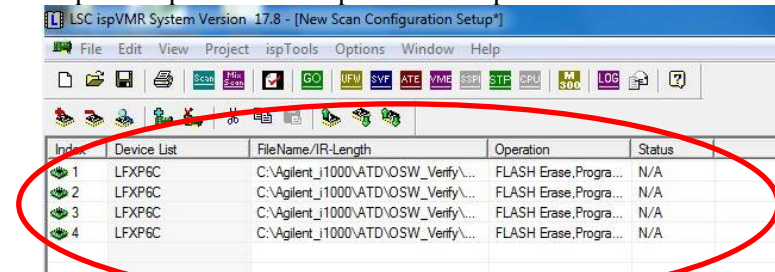
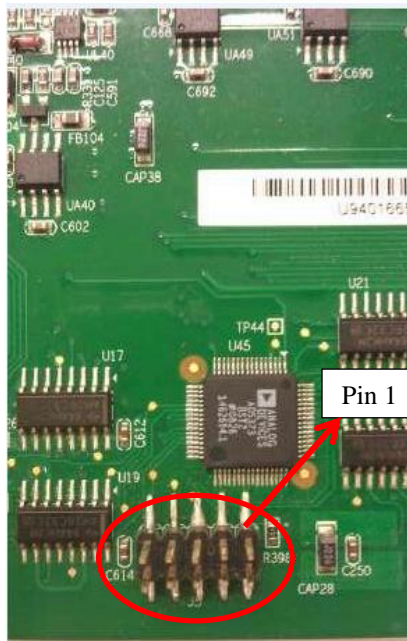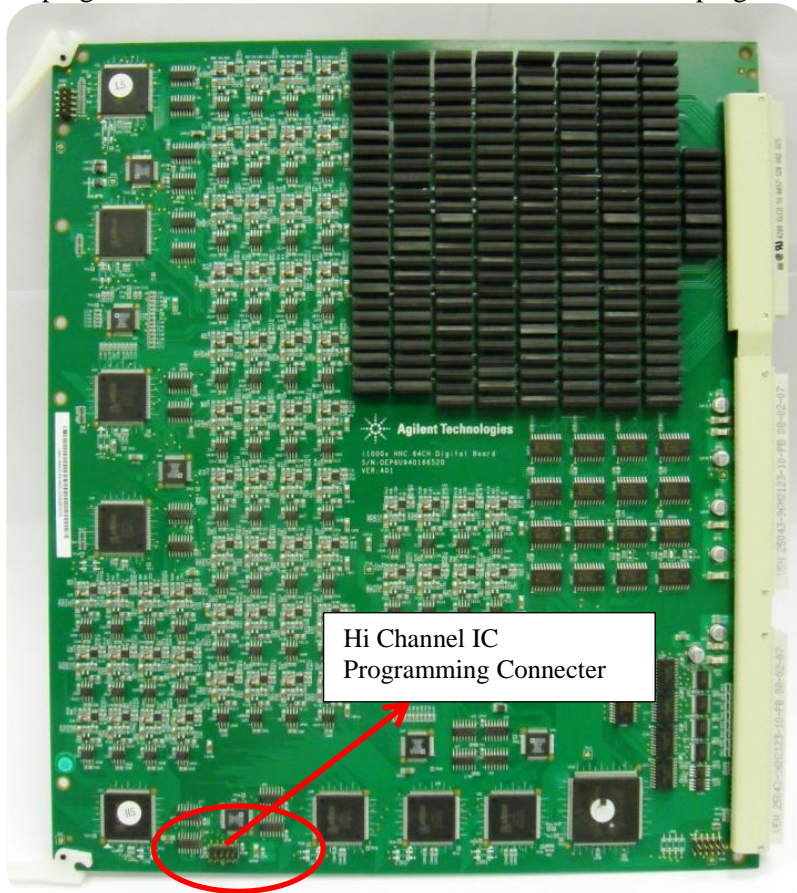7. Click "GO" to start programming.

8. Programming finished, all IC must show Pass, else repeat the process or replace the digital card.

**Connection of Download cable to Digital Card Low Channel IC**

1. Turn off the i1000 system and remove the Digital Card.
2. Unplug download cable from Low Channel connecter and plug into the High Channel connecter

Hi Channel IC Programming Connecter

Pin 1

3. Insert Digital card in card cage with the Download cable attached to it.
4. Leave space to allow the Download cable to be placed into the cardcage. If needed, remove the adjacent pin cards.
5. Turn on i1000D system power

Program firmware to High Channel ICs
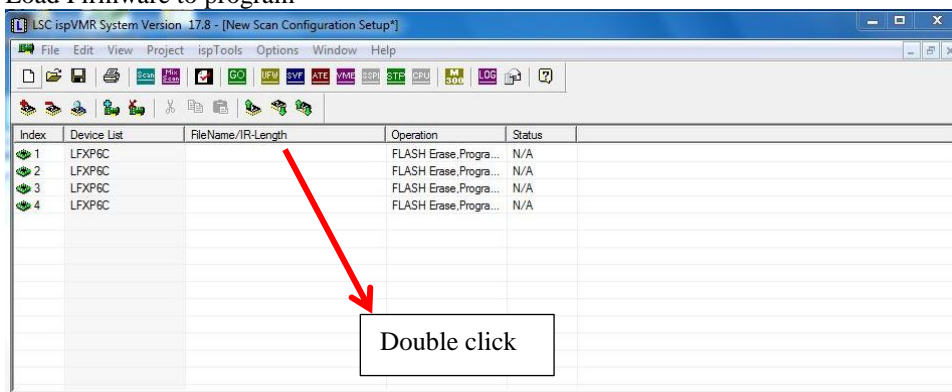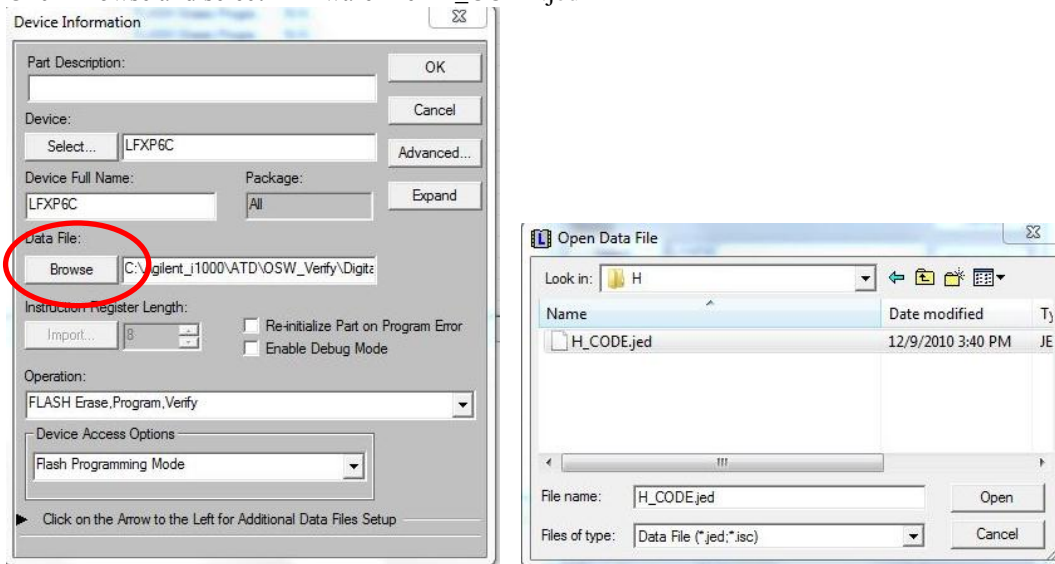
1. Select isp tools→Scan chain
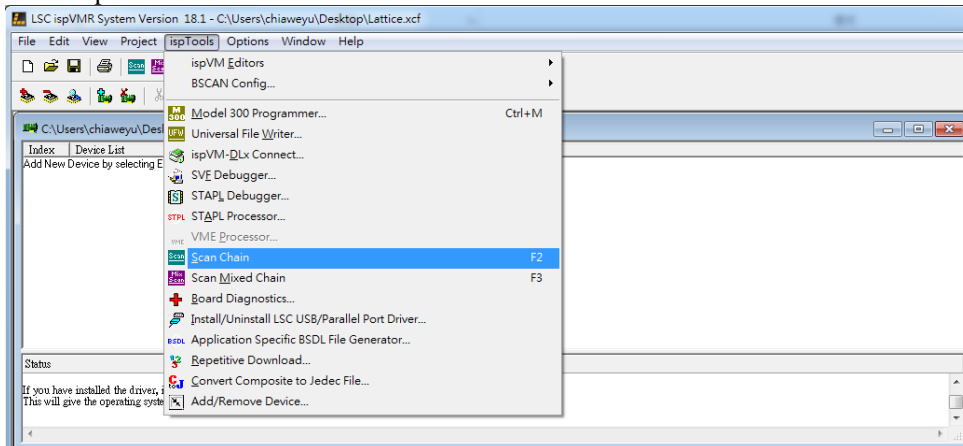
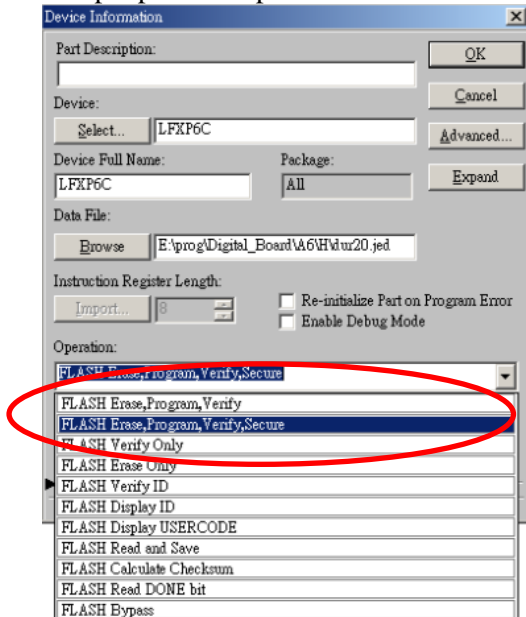2. High Channel IC will be detected and displayed
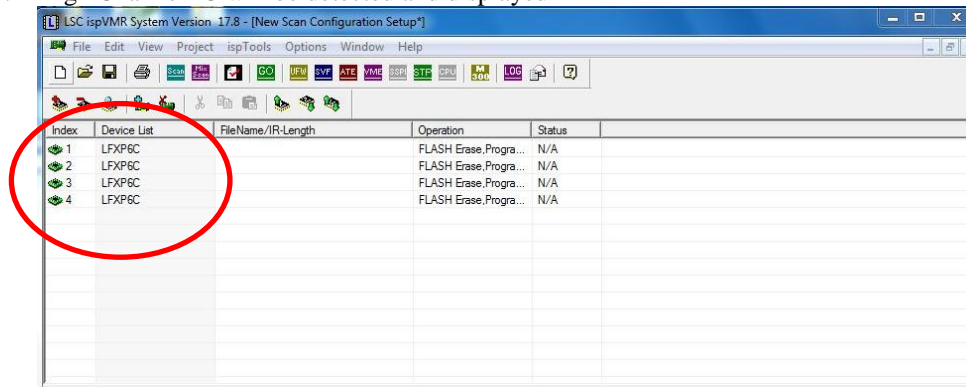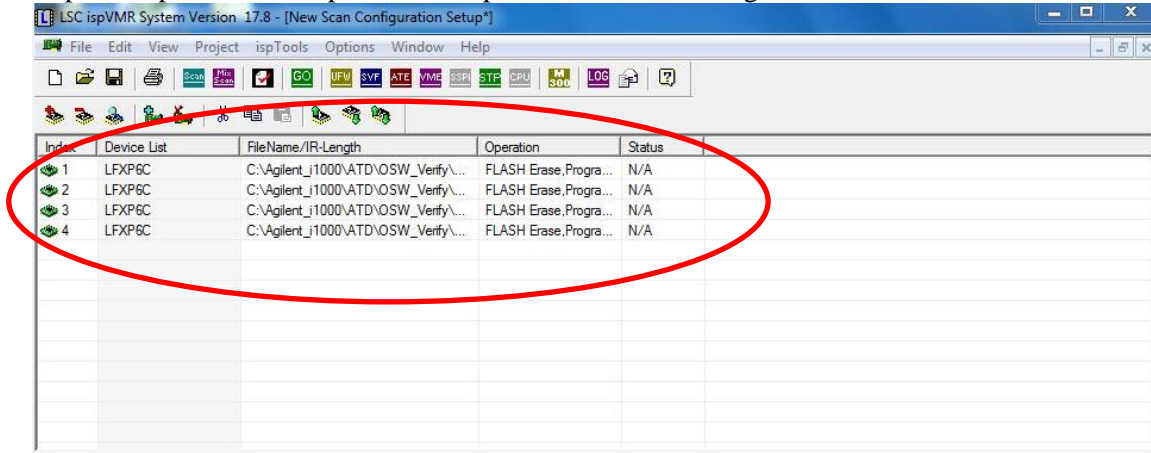

3. Load Firmware to program

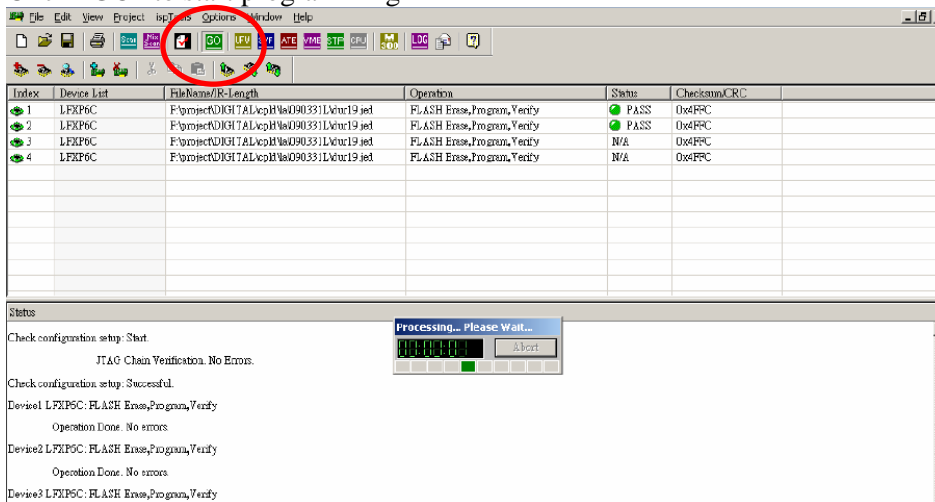4. Click Browse and select Firmware file "H_CODE.jed"

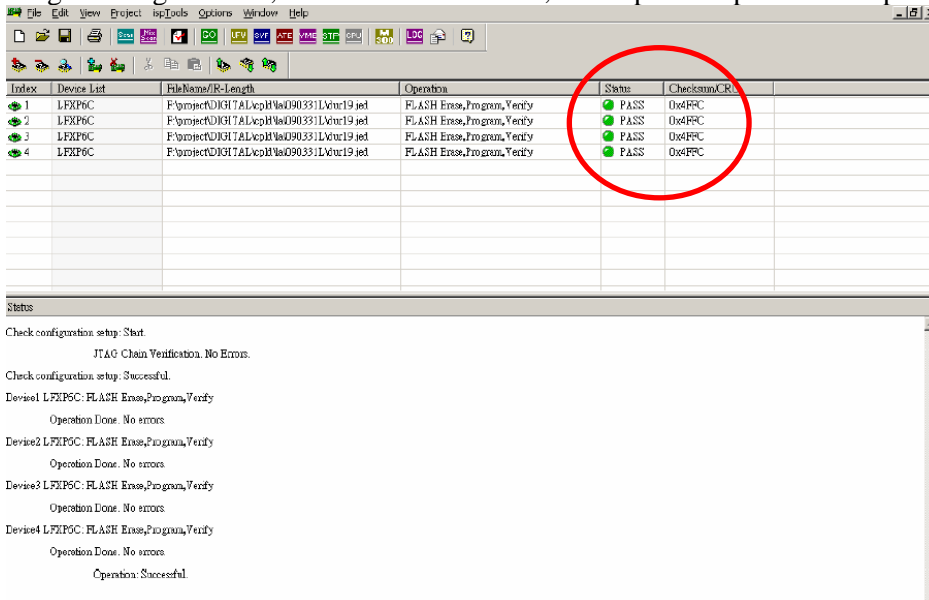5. Setup Operation options. Select "Flash Erase, Program, Verify, Secure"

6. Repeat Step3 to 5 to complete the setup for the rest of the High Channel IC.

7. Click "GO" to start programming

8. Programming finished, all IC must show Pass, else repeat the process or replace the digital card.

Future Tracking Purpose

1. The EDC for all the U9401-66520 at the barcode serial number need to revise to 5409
   The original label barcode of the serial number as Figure 1.0, the EDC cover with black permanent marker pen while add additional label 5409.

Figure 1.0

2. On top of the Lattice XP IC label, request to change from H6 & L6 to H7 & L7 as Figure 2.0
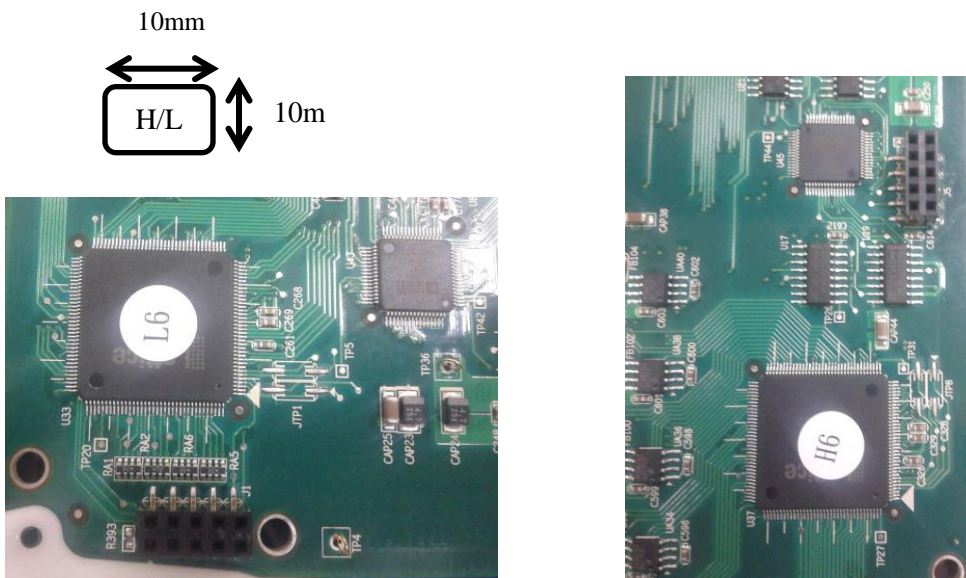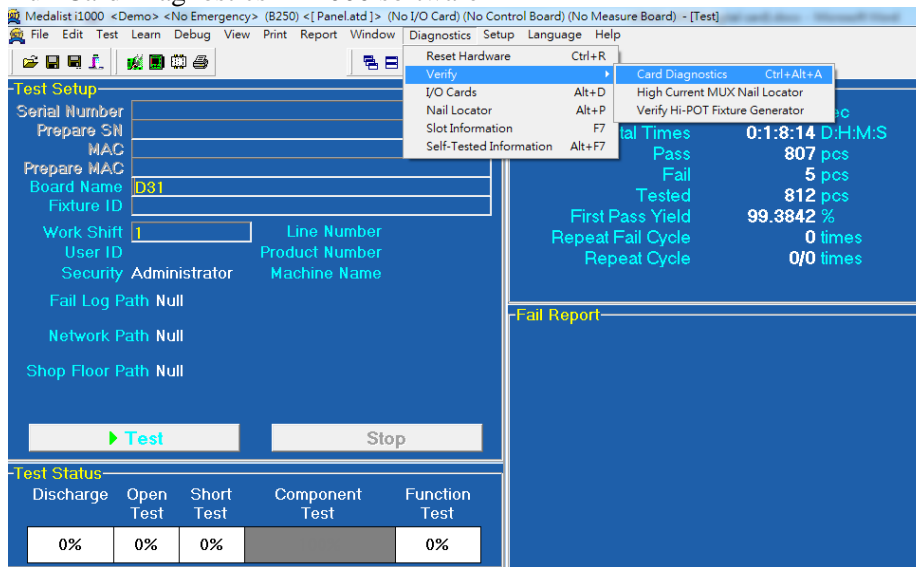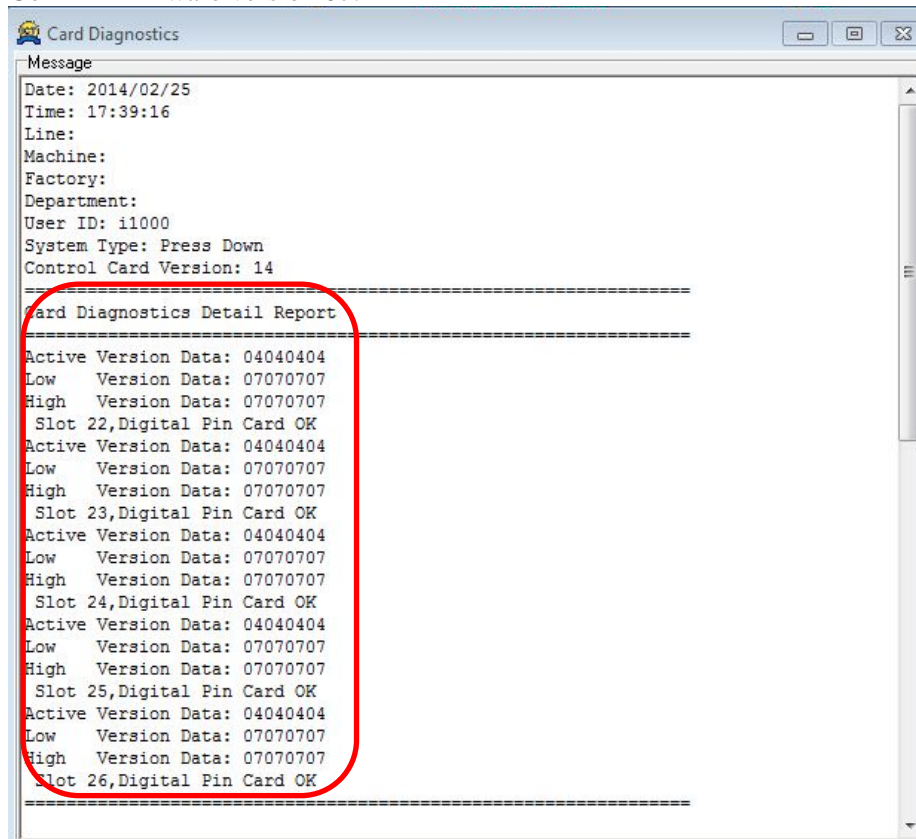

Figure 2.0

Confirm Digital Card Version

1. Run Card Diagnostics in i1000 software

2. Confirm firmware version 07.

Low = "07|07 |07|07" to represent the 4xLow Channel IC Firmware
High = "07|07 |07|07" to represent the 4xHigh Channel IC Firmware

Revision History:

Revision Number	Date	Author	Reason For Change
1.0		CW Yu	As published