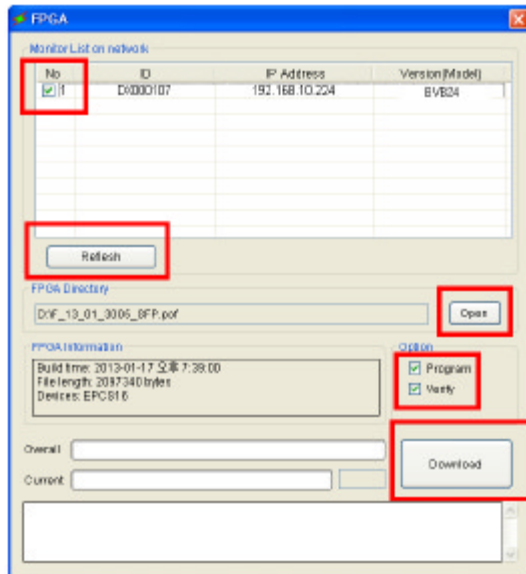# Procedure – LVB, PVB, BVB **FPGA upgrade**

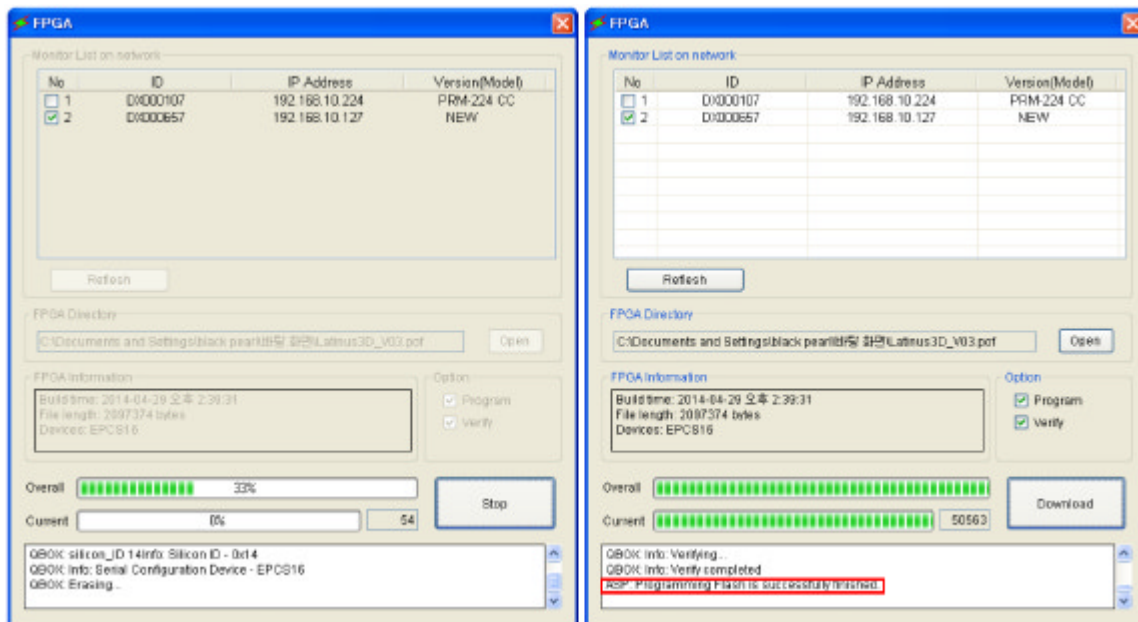2015-03-20-BLM, 2016-06-04-mb, 7/13/17-mb.

Materials & Software
1.   Requires BSC-100 vers. 3.0.1 or later (see BSC-100 manual for installation and full operation details)
2.   Reference: PC 2nd NIC setup procedure: NICquickprocedure_BSC_FPGA.pdf
        (for when PC is on office network subnet different from Monitor on second NIC card)

Assembly & Procedure
1.   Connect monitor and PC to network router of same subnet (for example, 192.168.0.X).
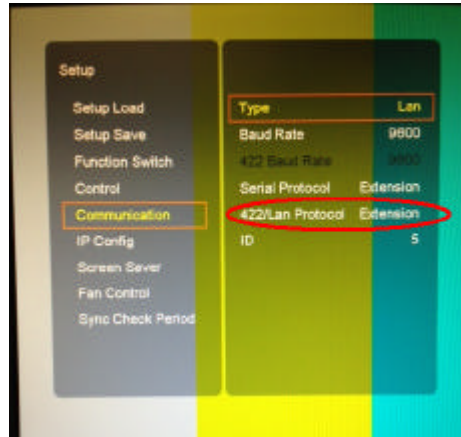2.   Start BSC-100 and select 'FPGA ISP' under Tool Menu:

3.   Click Refresh button (to find attached monitor[s]).
4.   Select monitor in list (click on check-box).
5.   Open FPGA.pof file (copied to local PC before disconnecting from Network [due to NIC Disable/Enable]).
6.   Click-check the Program and Verify boxes
7.   Click Download button
8.   When status box says "IP Programming is successfully finished", connect another monitor, or exit program and reconnect to the network.
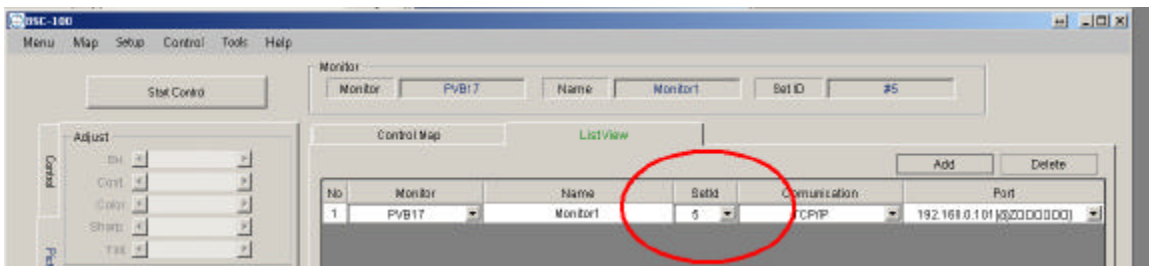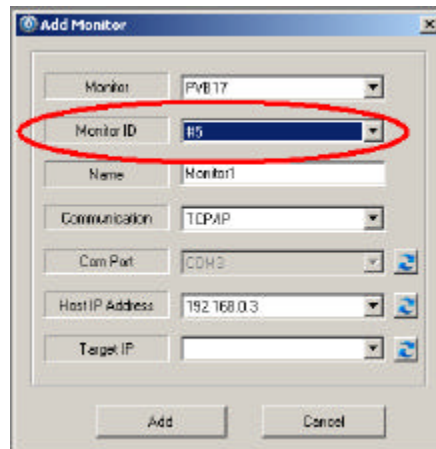
I. Setup notes

1. Ethernet comm. working with both DHCP and monitors fixed to 192.168.0.101.
2. Set "LAN Protocol" in monitor menu to "Extension".

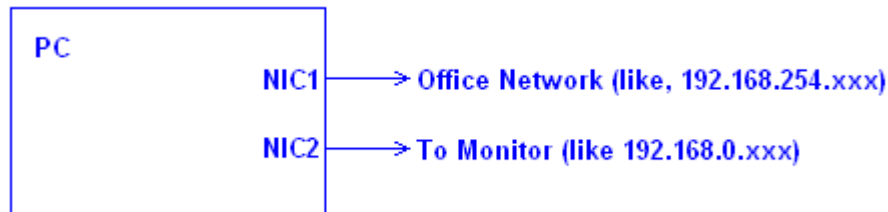3. "Monitor ID" in monitor must match Set ID / Monitor ID in BSC 100:

Using a Multi-Homing Workstation
Monitor Connection

boland

For PCs with a dual NIC (two network connections), deactivate the office network and activate the second network (monitor):

1. To check the status of the active NIC(s) on the workstation, run:
   Find-IP_Info.bat (enclosed)

2. Workstation:
   a. Close all Programs
   b. Open: Settings, Network Connections, right click on Local Area Connection, and choose Disable.
   c. Right click on Local Area Connection 2, choose Enable.

3. Set the comm parameters for LA2 to match you monitor

4. Run either IP Finder, to check the connection to your monitor, or BSC-100 for control or firmware updates.

```
PC
        NIC1 ——→ Office Network (like, 192.168.254.xxx)

        NIC2 ——→ To Monitor (like 192.168.0.xxx)
```

Firmware Update Procedre- BVB, PVB, LVB Monitors

(ISP=In Circuit Programmer (programming of parts installed in monitor)

BSC-100

Menu Map Setup Control Tools Help

1

FPGA ISP
F/W ISP

Start Control

Monitor   Name   Set ID

Source

Control

CVBS1 CVBS2
SVideo YPbPr
PC DVI
SDI1 SDI2

Picture

Firmware

Monitor List on network

2

No	ID	IP Address	Version(Model)	
☑ 1	DX000915	192.168.0.101	BVB25	

Reflesh

Keys

Audio

F1 F2
F4 F5
Scan Marker
HV VU

Marker/OSD

Directory

3

C:\1_Files\1_BVB\250_oled\1_PW\v07034_Sw500ms\BVB25_V07034.INF

Open .Inf File

Hex file	Start	End	Size	CRC32
☑ ⚡ Flasher	0A000	0C8FF	10172	A75AC41D
☑ ▊ BVB25_V07034	F20000	F938FF	471867	E8F5E7BF
☑ ▊ BVB_1920x1080_OL	FA0000	FD8CF0	232689	A1B3FFE3
☑ ▊ FactoryGui	F00000	F03984	14725	747672F7

F00000-FFFFFF

Menu

Functions

Up
Left Sel
Down

PIP

5

Overall
Current

6

FLASH: Change Boudrate 9600bps
FLASH: Successfully completed

Flash

4

Options
☑ Reset after download
☐ Verify flash only
☑ Reset before Flash
☐ Re Flash

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Edit Mode   Administrator   Ready   10:37:13 AM

Page1