



Part Num	ber: 41	75500xx-3	Model:	SVX-4096	
DATE	VERSION		SUMMA	RY OF CHANGES	NOTE
12 January 2016 (Revised on 17 February 2016) 24 March 2016	10 10 to 11	Bare PCB: 01755 BIOS: U20, E0 U24, V6 U33, U3 Release phase or	3_20150901.bin(SST2	0-3 6PA-100PG2S)(new) 12L)(same as SVX-2560) 5VF020)(web page of IP-60)(same as SVX-2560)	ECN# 870689544 ECN# 870689563
		 LVDS panel (eDP panel (8- Input: HDMI (2.0), ; HDMI (1.4) , Display Port (Dual-link DV Output resolution Key Features State Support V-By Support Nult Support PIP (pictures) Support RS-22 Onboard LAN direct/browse Onboard LEE Onboard temp Support exter Backlight cont Audio line ou Input power of Support DV I Bare PCB: 01755 BIOS: U20, V1 U24, V6 U33, U3 U41, DE U31,37, U34, DE 	anel (8-lane) anel (16-lane), with (8-channel) lane with max speed up to 4096x2160@60 up to 4096x2160@3 (1.2), up to 4096x2160@ on: 3840x2160, 1920 apport: -One, eDP or LVDS i-panel timings select Picture in picture) an 32 commands contro V port support comma mode) D backlight driver. berature sensor. nal sensors monitorir ttrol: D/A and PWM. t header for the conmo of DC12V/DC 24V. //5V/12V and 18V p. R remote handset. 0001-3; P/N 41755001 .00.00.00 (Flash F25L1 .06.0.0 (PIC32F675F5	HBR/4-lane with max speed HBR2) DHz OHz OHz OOHZ	870089303



1. Auto source seek • When there is no video input source, controller will go to next available input source and display Searching with input port under search in OSD • Auto source seek can be enabled/disabled in Advance menu > Auto source seek 2. VGA port • VGA port is available, as AV VGA • VGA setup menu is available, If's sub mean include: • Auto Source seek • Hostinon, V Position, Clock, Phase, • Color Gain (SerReset) adjust VGA ADC color gain. 3. Hot Key (incl+) and Hot Key 2 (Up/Down) • Hot Key (it-) and Hot Key 2 (Up/Down) • Hot Key (incl+) and Hot Key 2 (Up/Down) • Hot Key items: source input, backlight, brightness, contrast, sharpness, hus, saturation, aspect rulo, display mode, input source ment) • Invert: On & Colf hacklight insert • DA & A PWM. When DA is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to DA on-board circuit operation in circuit operation in the rol or or or in 25/step 5. Power Save menu (under advance menu) • Temo 2007 factule to the board 8. Gamma OFF item is removed 9. Remove Color format (RGP/UV) menu under color menu 10. Remove music format (RGP/UV) menu under color menu 10. Remove may the iso and down. 11. When oSD menu is in configuration kev1 submenu file sting backlight, it shows "Press SEL. DN key t	6 July 2016	11 to 12	Release	phase two firmware V1.04.0	0.00	ECN#
 When there is no video input source, controller will go to next available input source and display Searching with input port under search in OSD Auto source seek can be enabled/disbled in Advance menu > Auto source seek VGA port is available as AD: VGA VGA source menu is available. If is sub menu include: 						870689593
and display Searching with input port under search in OSD - Auto source seck can be calibed/displabed in Advance memu >- Auto source seck 2. VGA port is available. arX. VGA - VGA setup memu is available. If's sub memu include: - VGA setup memu is available. If's sub memu include: - Auto Adjust: Auto adjust Hopation, VDostion, Clock Phase - Glor Cain (SetReset; adjust VGA ADC color gain. 3. Hot Key (under advance memu) - Into key 1(+) and Hot key 2 (Up/Down) - Hot key items: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, ipath vasop. PTP Size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Invert: On & Off backlight invert - D/A & PVM: When D/A is enabled, it will set PVM frequency to 160Hz, which seems the best frequency to work in PVM to D/A on-board solitak (VGA), volume, no function 6. Advanced RS-232 commands 7. SPPUF adjust prowen -50% is 7. SPA 7. SPDFI adjus charbox memu (under advance menu) - Turn On/Off and powers vare feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPPUF adjust prowed 7. SPDFI adjus prowed adjust wave change" 10. Remove culor format (KGRPVUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma / Temperature, Color ffffect, Hue, Saturation					controller will go to payt available input source	
- Auto source seek can be enabled/itsabled in Advance menu -> Auto source seek 2. VGA por - VGA port is available as A0: VGA - VGA setty menu is available. If's soft menu include: - Auto Adjust: Auto adjust H position, V Position, Clock & Phase - Horo Status, V Position, Clock, Phase, - Color Gain (Set/Reset): adjust VGA ADC color gain. 3. Hor Key (under advance menu) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 2 (Up/Down) - Hot key (1er/-) and Hot key 3 (Up/Down) - Hot key (1er/-) and Hot key 3 (Up/Down) - Hot key (1er/-) and some hot key and the setting operation - Frequency: Adjust PWM freq Iron 100Hz to 440Hz in 20Hz/step - Mon backlight level: Range between 0-S0% in 2%Msep - Torm On/Off and power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF addic: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature. Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (Hick setting backlight), it shows Press SEL. DN key to confirm and save change? 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Undef factory menu, it contains Backlight Setup and Vby1						
- VGA setup neun is available as A0: VGA - VGA setup neun is available as X0: VGA - VGA setup neun is available. It's sub menu include: - Auto Adjust: Auto adjust II position, V Position, Clock & Phase - Horistion, V Position, Clock, Phase, - Color Gain (Set/Reset): adjust VGA ADC color gain. 3. Hot Key (inder advance menu) - Hot key it emis: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input way, PIP size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Invert: On & Off backlight invert - D/A & PWM: When D/A is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to D/A on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 440Hz in 20Hz/step - Min backlight level: Range feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF addio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGR/HUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hae, Saturation 11. When OSD menu is is aconfiguration level submenu (like setting backlight), it shows Tress STL. DN key to confirm and save change ² 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is is downloaded, it performs load all default. 15. Add 340x(2160 = 30Hz EDT) babie in DP. 16. The hot key 1 and 2: Lons are changed such that hot key 1 icon only has + and - while hot key 2: ano only has ay and dow. 10. Remove submer menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port mame is shown - More key 1 and 2: Lons are changed such that No in			-			
 VGA setup menu is available. If's sub menu include: Auto Adjust: Atoa dailyst H position. V Dosition, Clock & Phase H Position. V Position, Clock, Phase. Color Gain (Set/Reset: adjust VGA ADC color gain. Hot Key (14/-) and Hot Key 2 (Up/Down) Hot Key (14/-) and Hot Key 2 (Up/Down) Invert: On & Off backlight invert D/A & PWM: When D/A is mabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to D/A on-board circuit operation Frequency: Adjust PW frequency form 100Hz to 440Hz in 20Hz/step Min backlight level: Range between 0-30% in 2%/step Power Save menu (under advance menu) Turn On/Off auto power save fature of controller board when there is no signal input 6. Advancet R8-32 commands SPDIF andio: Default enable on the board Rennove Color format (RGB/YUV) menu under color menu Rennove Color format (RGB/YUV) menu under color menu Rennove color format RGB/BANC Color Effect, Hue, Saturation When DR is is configuration level submemu (like setting backlight), it shows "Press SEL, DN key to confirm and save change" Show firmware version on lower left corner of the OSD menu Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items When new firmware is downloaded, it performs load all default. S Ads 4340(2160/2014 EDDI table in DP. The tok k						
- Auto Adjust: Auto adjust H position, V Position, Clock, & Phase - H Position, V Position, Clock, Phase, - Color Gain (Set/Reset): adjust VGA ADC color gain. 3. Hot Key (under advance menu) - Hot key 1 few): a more input, backlight, brighness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input swap, PP Size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Lova & OF Mbacklight invert - DA & & PWM: When DA is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to DX on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 440Hz in 20H2/step - Min backlight Hevel: Range between 0-50% in 2%/step S. Power Save menu (under advance menu) - Turn On/Of auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDF aduit D-Faint advance menu) - Turn On/Of auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDF aduit D-Erfaint enable on the board 8. Gamma, OFF item is removed 9. Remove Color Fifter, Huc, Saturation 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Huc, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows Tress SHL. DN key to confirm and save change? 12. Show firmware is downloaded, it performs load all default. 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 4. When new firmware is downloaded, it performs load all default. 15. Add 3480/2160@390Hz EDD Table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 1 and 2 icons are changed such that No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input				-		
- H Position, V Position, Clock, Phase, - Color Gain (StRWest): adjust VGA ADC color gain. 3. Hot Key (under advance menu) - Hot key 1 (+/-) and Hot key 2 (Up/Down) - Hot key i femis: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input swap, PIP size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Invert: On & Off backlight invert - DA & PWM: When DA is c nabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to DA on-board circuit operation - Frequency: Adjust PWM trep from 100Hz to 440Hz in 20HZ/step - Min backlight level: Range between 0-50% in 2/9/step 5. Power Save menu (under advance menu) - Turn On/Off auto power save feature of controller board when there is no signal input 6. Advance HZ S-322 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Navo color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Staturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SHL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backli			- VGA	-		
- Color Gain (Set/Reset): adjust VGA ADC color gain. 3. Hoft Key (inder advance menu) - Hoft Key 11 (4/-) and Hot Key 2 (Up/Down) - Hot Key items: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input swap, PIP size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Invert: On & Off backlight invert - DA/A & PVMH: When D/A is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to D/A on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 440Hz in 20Hz/step - Min backlight level: Range between 0-50% in 2%/step 5. Power Save menu (under advance menu) - Turn On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF aduit Def and power save feature of controller board when there is no signal input 7. Argunt (EV) (EV) (EV) (EV) (EV) (EV) (EV) (EV)				0 0 I		
- Hot key 1 (+/-) and Hot key 2 (Up/Down) - Hot key tiems: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input swap, PIP size, auto adjust (VGA), volume, no function 4. Backlight OSD menu (under advance menu) - Invert: On & Off Backlight invert - D/A & PVM: When D/A is enabled, it will set PVM frequency to 160Hz, which seems the best frequency to which pVM freq from 100Hz to 440Hz in 20Hz/step - Min backlight levit: Range between 0-50% in 2%/step 5. Power Save menu (under advance menu) - Turn On/Off auto power save fature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu file setting backlight), it shows *Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left cores of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@ 30Hz EDID table in DP. 16. The hot key 1 and 2 ions are changed such that hot key 1 ioon only has + and - while hot key 2 ioon only has up and down. 17. The hot key input source is changed and the OSD box "Searching"				- Color Gain (Set/Reset): adjus		
- Hot key items: source input, backlight, brightness, contrast, sharpness, hue, saturation, aspect ratio, display mode, input swap, PIP size, auto adjust (VGA), volume, no function 4. Backlight OSD mem (under advance menu) - Invert: On & Off backlight invert - D/A & PWM: When DA A is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to D/A on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 440Hz; in 20Hz/step - Min backlight level: Range between 0-50% in 2%/step 5. Power Save memu (under advance menu) - Turn On/Off auto power save feature of controller board when there is no signal input 6. Advanced R8-232 commands 7. SPDIF aduit: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/VU) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color ffrect, HRC Sutaration 11. When OSD memu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware vision on lower left corer of the OSD memu 13. Factory memu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is changed such that hot key 1 icon only has + and - while hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed suc						
aspect ratio. display mode, input swap, PIP size, auto adjust (VGA), volume, no function 4. Backlight NOS Demen (under advance menu) - Invert: On & Off backlight invert - D/A & PWM: When D/A is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM to D/A on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 440Hz in 20Hz/step - Min backlight levit: Range between 0-50% in 2%/step 5. Power Save menu (under advance menu) - Turn On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF andic: Default cnable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/VU) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left codSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x21600@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while bot key 2 icon only has up and down.						
4. Backlight OSD menu (under advance menu) - Invert - D/A & PWM: When D/A is enabled, it will set PWM frequency to 160Hz, which seems the best frequency to work in PWM freq from 100Hz to 440Hz in 20Hz/step - Min backlight level: Range between 0~50% in 2%/step 5. Power Save menu (under advance menu) - Turm On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-332 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. New color menu fas following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL_D Nk to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x21606/30142 EDD table in DP. 16. The hot key 1 and 2 icons are changed such that 17. The hot key input source is changed and the OSD box "Searching" with next input port name is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown 20.						
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the best frequency to work in PWM to D/A on-board circuit operation - Frequency: Adjust PWM freq from 100Hz to 40Hz in 20Hz/step - Min backlight level: Range between 0-50% in 2%/step 5. Power Save menu (under advance menu) - Tum On/Off atto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF andio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/VUV) menu under color menu 10. Remove unused menu olor color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corms for the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that No put source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown <				6		
- Frequency: Adjust PWM freq from 100Hz to 440Hz in 20Hz/step - Min backlight level: Range between 0-50% in 2%/step S. Power Save menu (under advance menu) - Turn On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDDI table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key 1 and 2 icons are changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - Once key and 2.32 0xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Tess # Function Description 11 LVDS data mapping OFF: VESA 0N: JEIDA 2 Panel display division O: 1 division 10: 1 divisions 11: 4 divisions 11: 8 divisions 11: 8 divisions 11: 8 divisions 11: 8 divisions						
- Min backlight level: Range between 0-50% in 2%/step 5. Power Save menu (under advance menu) - Tum On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/VUV) menu under color menu 10. Remove unused menu menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@ 30401z EDDI bable in DP. 16. The hot key 1 and 2 icons are changed such that • No input source menu is shown • Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown • Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown • Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown • Once key is pressed, channel is changed and the OSD box meaning. All SVX-4096				1 1	-	
- Turn On/Off auto power save feature of controller board when there is no signal input 6. Advanced RS-232 commands 7. SPDIF aulie: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vbyl setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed and the OSD box "Searching" with next input port name is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown in thas no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function 1 LVDS data mapping <			- Min	backlight level: Range betweer	n 0~50% in 2%/step	
6. Advanced RS-232 commands 7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is showm - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - No input source nexu is shown - No input source nexu is indomenu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition 21. Distic BUA OFF: VESA ON: JEIDA 22. Panel display division 00: 1 division 10: 2 divisions 10: 4 divisions 4						
7. SPDIF audio: Default enable on the board 8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL, DN key to confirm and save change" 12. Show firmware version on lower left comer of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that • No input source is changed such that • No input source is changed such that • No input source is changed and the OSD box "Searching" with next input port name is shown • + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Tos. # Function Description 1 LVDS data mapping Of					e of controller board when there is no signal input	
8. Gamma OFF item is removed 9. Remove Color format (RGB/YUV) menu under color menu 10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL_DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that No input source menu is shown 0. Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - hot input source is changed such that 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 0xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition 11 LVDS data mapping OFF: VESA ON: HEIDA 2 Panel display division 00: 1 division 10: 2 divisions 10: 4 divisions </td <td></td> <td></td> <td></td> <td></td> <td>pard</td> <td></td>					pard	
10. Remove unused menu under color menu. Now color menu has following submenu: Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@ 30Hz EDD table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - And UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-2320 xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition 21. Add Dip switch SW4 definition 22. Panel display division 00: 1 divisions 11: 8 divisions 11: 8 divisions 11: 8						
Gamma, Temperature, Color Effect, Hue, Saturation 11. When OSD menu is in configuration level submenu (like setting backlight), it shows "Press SEL. DN key to confirm and save change" 12. Show firmware version on lower left corner of the OSD menu 13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - Anocekey is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition 21 Panel display division 3 ON: JEIDA 2 Panel display division 3 OI: 2 divisions 11: 8 divisions 11: 8 divisions						
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13. Factory menu is kept. Under factory menu, it contains Backlight setup and Vby1 setup items 14. When new firmware is downloaded, it performs load all default. 15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - Hond UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition 21. Add Dip switch SW4 definition 22. Panel display division ON: JEIDA 2 Panel display division 3 00: 1 division 4 Output display bit mode 9FF: 10-bit Selection 4 Output display bit mode OFF: 10-bit 9Her display bit mode OFF: 10-bit						
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15. Add 3840x2160@30Hz EDID table in DP. 16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function 1 LVDS data mapping 0F: VESA 0N: JEIDA 2 Panel display division 00: 1 division 10: 4 divisions 11: 8 divisions 12: 4 divisions 13					it performs load all default	
16. The hot key 1 and 2 icons are changed such that hot key 1 icon only has + and - while hot key 2 icon only has up and down. 17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 0xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function 0 Description 1 LVDS data mapping OFF: VESA 0N: JEIDA 2 Panel display division 01: 2 divisions 10: 4 divisions 11: 8 divisions 12: 4 0N: JEIDA 2 Panel display bit mode 0FF: 10-bit 18: 8 divisions 11: 8 divisions 12: 8 divisions					-	
17. The hot key input source is changed such that - No input source menu is shown - Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 0xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function Description 1 LVDS data mapping OFF: VESA ON: JEIDA 2 Panel display division 00: 1 division 3 01: 2 divisions 10: 4 divisions 11: 8 divisions 4 Output display bit mode Section OFF: 10-bit ON: 8-bit						
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- Once key is pressed, channel is changed and the OSD box "Searching" with next input port name is shown - + and UP: Go to next input; - and DOWN: Go to previous input - + and UP: Go to next input; - and DOWN: Go to previous input 18. Remove stand along icon under audio menu as it has no function 19. Implemented RS-232 Oxee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function Description 1 LVDS data mapping OFF: VESA 00: 1 division 00: 1 division 3 01: 2 divisions 4 Output display bit mode OFF: 10-bit 0N: 8-bit 0N: 8-bit					such that	
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19. Implemented RS-232 0xee 0x62 OSD switch mount lock command. All SVX-4096 features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function Description 1 LVDS data mapping OFF: VESA 0N: JEIDA ON: JEIDA 2 Panel display division 00: 1 division 3 01: 2 divisions 10: 4 divisions 11: 8 divisions 4 Output display bit mode selection OFF: 10-bit ON: 8-bit						
features available RS-232 commands are implemented. 20. Add Dip switch SW4 definition Pos. # Function 1 LVDS data mapping 0FF: VESA ON: JEIDA 2 Panel display division 3 01: 2 divisions 10: 4 divisions 11: 8 divisions 4 Output display bit mode selection ON: 8-bit						
20. Add Dip switch SW4 definitionPos. #FunctionDescription1LVDS data mappingOFF: VESA ON: JEIDA2Panel display division00: 1 division 01: 2 divisions 10: 4 divisions 11: 8 divisions311: 8 divisions selection4Output display bit mode selection0N: 8-bit						
Pos. #FunctionDescription1LVDS data mappingOFF: VESA ON: JEIDA2Panel display division00: 1 division301: 2 divisions 10: 4 divisions 11: 8 divisions4Output display bit mode selectionOFF: 10-bit ON: 8-bit						
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10: 4 divisions 11: 8 divisions 4 Output display bit mode selection ON: 8-bit				Panel display division		
4 Output display bit mode selection OFF: 10-bit ON: 8-bit			3			
4 Output display bit mode OFF: 10-bit selection ON: 8-bit						
selection ON: 8-bit			4	Output display bit mode		
5 Reserved				selection		
			5	Reserved		



		6 Reserved OFF: Vx1 I/O se and JC2[4:1] ON: Vx1 I/O sett Jumper : Close (I		
		 Move Backlight setup menu under factory menu Add Vx1 setup menu under factory menu Add Vx1 pin 15 ~ pin 24 adjust menu to set to either HIGI When MENU key is pressed for 3 seconds while power up default including reset Vx1 output pin to low state. Change backlight min level default value from 0 to 5% To solve Innolux V500DK2-KS1 startup screen corruption startup time before turning on backlight is increased. Solved the firmware version no. string corruption issue wh key to confirm change" is displayed. Add RS-232 command 0xee 0x72 Vx1 pin state setting to 29. When MENU key is pressed for 3 seconds while power up default including reset Vx1 output pin to low state. It is requested to disable startup Logo display by default 31. In OSD timeout menu, if timeout is set as 10, we display "othat OSD is always ON Implement color temperature 3200K Set default contrast value to higher one (but display value 1 brightness in default setting One Panel timing can be downloaded to EEPROM through selected by setting SW3 to all ON 	H or LOW state , SVX-4096 will load all n issue found by customer, the en the string "Press SEL DN. set Vx1 pin 15 - pin 24. , SVX-4096 will load all On" instead of 10 to indicate keep 50) to achieve max	
		 35. Rundown counter support. Bare PCB: 017550001-3; P/N 417550012-3 BIOS: U20, V1.04.00.00 (Flash F25L16PA-100PG2S)(cha U24, V6.06.0.0 (PIC32F675F512L)(no change) U33, U33_20160307.bin(SST25VF020)(web page c U41, DDC checksum(D9)(no change) U31,37, DDC checksum(D9,13)(no change) U34, DDC checksum(64,82)(no change) U34, DDC checksum(76,22)(no change) U19, DDC checksum(76,22)(no change) 		
10 January 2017	12 to 13	Firmware change V1.05.0000 Change details please refer to 417550021-3 Bare PCB: 0175500	ECN# 870689625	
		01-3; P/N 417550013-3 BIOS: U20, V1.05.00.00 (Flash F25L16PA-100PG2S)(cha U24, V6.06.0.0 (PIC32F675F512L)(no change) U33, U33_20170105.bin(SST25VF020)(web page of U41, VGA/DVI DDC (checksum AD,8E)(changed) U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(ch U34, HDMI(P4) DDC (checksum 7E,46) (changed) U19, DP DDC (checksum 91,70) (changed)	of IP-60)(changed)	
Jan 20, 2017	13 to 14	 Release firmware V1.06.00.00 which included above non-release Fix the IE-2000 LVDS 4-ch panel timing Change the OSD menu word from "Advance" to "A 	870689626)
		 Bare PCB: 017550001-3; P/N 417550014-3 BIOS: U20, V1.06.00.00 (Flash F25L16PA-100PG2S)(cha U24, V6.06.0.0 (PIC32F675F512L)(no change) U33, U33_20170105.bin(SST25VF020)(web page of U41, VGA/DVI DDC (checksum AD,8E)(no change) U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(not U34, HDMI(P4) DDC (checksum 7E,46) (no change) U19, DP DDC (checksum 91,70) (no change) 	of IP-60)(no change) e) o change)	



30 June 2016	1x to 20	Release p	bhase two firmware V1.04.0	0.00 included above non-released versions	ECN# 870689591
2010		1. Auto sc	ource seek		870089391
				e, controller will go to next available input source	
		-	y Searching with input port un		
				sabled in Advance menu -> Auto source seek	
		2. VGA p	port is available as A0: VGA		
			setup menu is available. It's s	ub menu include:	
				position, V Position, Clock & Phase	
			- H Position, V Position, Clock		
			 Color Gain (Set/Reset): adjust y (under advance menu) 	st VGA ADC color gain.	
			key 1 (+/-) and Hot key 2 (Up/	Down)	
			• • • • • •	ght, brightness, contrast, sharpness, hue, saturation,	
				PIP size, auto adjust (VGA), volume, no function	
			ht OSD menu (under advance rt: On & Off backlight invert	menu)	
				d, it will set PWM frequency to 160Hz, which seems	
			equency to work in PWM to D	1 1	
				100Hz to 440Hz in 20Hz/step	
			backlight level: Range between Save menu (under advance me		
				e of controller board when there is no signal input	
		6. Advanc	ed RS-232 commands		
			audio: Default enable on the b	oard	
			OFF item is removed e Color format (RGB/YUV) m	enu under color menu	
				enu. Now color menu has following submenu:	
			Temperature, Color Effect, Hue		
				level submenu (like setting backlight), it shows	
			L. DN key to confirm and save firmware version on lower left		
				cory menu, it contains Backlight setup and Vby1	
		setup iter	• •		
		14. When	new firmware is downloaded,		
			840x2160@30Hz EDID table		
			icon only has up and down.	ed such that hot key 1 icon only has + and - while	
			ot key input source is changed	such that	
		- No in	put source menu is shown		
				nged and the OSD box "Searching" with next input	
		1	name is shown d UP: Go to next input; - and l	DOWN: Go to previous input	
			ve stand along icon under audi		
				D switch mount lock command. All SVX-4096	
		features av	vailable RS-232 commands are	e implemented.	
		20. Add D	Dip switch SW4 definition		
		Pos. #	Function	Description	
		1	LVDS data mapping	OFF: VESA	
			N 111 1 111	ON: JEIDA	
		2	Panel display division	00: 1 division 01: 2 divisions	
				10: 4 divisions	
				11: 8 divisions	
		4	Output display bit mode	OFF: 10-bit	
		5	selection	ON: 8-bit	
		5	Reserved Reserved	OFF: Vx1 I/O settings by JC1[16:1]	
			10001100	and JC2[4:1]	
				ON: Vx1 I/O settings by OSD	
				Jumper : Close (H), Open (L)	



		 21. Move Backlight setup menu under factory menu 22. Add Vx1 setup menu under factory menu 23. Add Vx1 pin 15 - pin 24 adjust menu to set to either HIGH or LOW state 	
		23. Add Vx1 pin 15 ~ pin 24 adjust menu to set to either HIGH or LOW state24. When MENU key is pressed for 3 seconds while power up, SVX-4096 will load all default including reset Vx1 output pin to low state.	
		25. Change backlight min level default value from 0 to 5%	
		26. To solve Innolux V500DK2-KS1 startup screen corruption issue found by customer, the startup time before turning on backlight is increased.	
		27. Solved the firmware version no. string corruption issue when the string "Press SEL DN. key to confirm change" is displayed.	
		28. Add RS-232 command 0xee 0x72 Vx1 pin state setting to set Vx1 pin 15 - pin 24.29. When MENU key is pressed for 3 seconds while power up, SVX-4096 will load all default including reset Vx1 output pin to low state.	
		30. It is requested to disable startup Logo display by default31. In OSD timeout menu, if timeout is set as 10, we display "On" instead of 10 to indicate	
		that OSD is always ON 32. Implement color temperature 3200K	
		33. Set default contrast value to higher one (but display value keep 50) to achieve max brightness in default setting	
		34.One Panel timing can be downloaded to EEPROM through RS-232 interface. It is selected by setting SW3 to all ON35. Rundown counter support.	
		Hardware changes:	
		 Add 10V panel selection support on JA3 Add LED backlight driver current selection by JB8 (90mA, 100mA, 120mA and 150mA) Add JP1 to force flash programming mode for development use. Not install CN4. 	
		Bare PCB: 017550002-3; P/N 417550020-3 BIOS: U20, V1.04.00.00 (Flash F25L16PA-100PG2S)(changed)	
		U24, V6.06.0.0 (PIC32F675F512L)(no change) U33, U33_20160307.bin(SST25VF020)(web page of IP-60)(no change)	
		U41, DDC checksum(D9)(no change) U31,37, DDC checksum(D9,13)(no change)	
		U34, DDC checksum(64,82)(no change) U19, DDC checksum(76,22)(no change)	
Jan 10, 2017	20 to 21	Release firmware V1.05.00.00 which included above non-released versions	ECN# 870689625
		 Add color temperature 3200K in OSD menu and RS-232 command. Change EDID table to solve the inconsistency between panel timing and Display range 	
		limit. - Add OSD EDID setup menu under factory menu.	
		(When user press the Reset icon under EDID setup menu, the default EDIDs in firmware will be downloaded to EDID EEPROMs for all HDMI ports and DVI port.)	
		- In audio source selection, the default is changed to use digital source (HDMI, DP) instead	
		of analog line in. - Add color temperature 3200K in OSD menu and RS-232 command.	
		- After restore to default, the following states are kept without change, instead of restore to default value: (i)IP-60, (ii) RS-232 mode and (iii) Input ports of all video windows 1-4.	
		(iv)The backlight status (including: backlight level, backlight PWM freq, backlight invert, backlight pwm/da, backlight min.)	
		- Saving the changed of Sharpness value to all ports. (all ports are saved with same values), instead of individual port.	
		- Add default power function with OSD menu and RS-232 command 0xee 0x6b 0x50.	
		Default power state is not changed even after load factory default. - Pressing MENU key for 3 seconds to change between normal mode and standby mode. In	
		standby mode, LED1A is red. - Load all default settings is now triggered by pressing SEL DN. key for 3 seconds when the	
		board is power up. When load all default started, LED1A both red and green LEDs are turned on.	
		- IP60 OSD menu page is changed to communication with selection of either enabling RS- 232 or network (IP-60)	



- Decrease startup time from standby to normal mode	
- Add AUO M270DAN02.3 2560x1440 8-ch 120Hz LVDS panel parameters	
- In power off state, only power key will be processed in IR remote control	
- When power on, display Power On OSD message so that user knows that the controller has	
responded to user power on input.	
- Add AUO M270DAN02.3 2560x1440 8-ch 120Hz LVDS panel with preferred EDID	
timing	
- Fix the bug that VGA clock change larger than 16 steps, and then cancel, the screen is	
black	
- Implemented preferred EDID timing according to DIP switch SW3 setting	
- DP EDID is changed: Add 3840x2160@60Hz, 3840x2160@30Hz, 1080p@60Hz at ext	
detailed timing descriptor	
- DVI EDID is changed: increased from 128 bytes to 256 bytes by adding 3840x2160@30Hz	
and 1080p@60Hz at ext detailed timing descriptor	
- HDMI1.4 EDID is changed: Add 3840x2160@30Hz and 1080p@60Hz at ext detailed	
timing descriptor	
- HDMI2.0 EDID is changed: Change vendor specific block max TDMS freq from	
0x38(305MHz) to 0x78 (600MHz) for HDMI2.0 max clock rate, followed setting of SAC40	
sample EDID. Add 3840x2160@30Hz at ext detailed timing descriptor 2 position.	
1080p@60Hz is moved to 3 position	
- In RS-232 0x80 0x50 command to select audio source	
- Reset value is changed from analog to digital 1-2	
- If user select audio digital region which is VGA or DVI source, it will be changed to use	
analog audio as source	
- Fix the issue that in PIP mode, when changing main picture aspect ratio, there is no	
response.	
- Fix the issue that pressing MUTE key will display OSD menu	
- When IR volume up/down key is pressed, OSD volume menu is displayed	
- In audio selection OSD menu, If the digital regions source is VGA or DVI, it becomes gray	
and cannot be chosen. It is because VGA or DVI does not contain digital audio. If the select	
audio source channel is actually VGA or DVI, it is switched to analog audio source.	
- Fix incorrect no. if red dot in OSD menu	
- Advance menu has 8 items. (go up to default power)	
 Display function:2P PIP: 7 items Fix the issue that when OSD menu shows the info page in 4P mode, the firmware version 	
no. is corrupted.	
- Fix the issue that when power on, the OSD message of video info, especially in 4P mode, is	
corrupted.	
- Implement AUO M320QAN01.0 3840x2160 eDP1.1 panel parameters	
- RS-232 commands : Audio command: 0x80 'P',	
- Digital region 2 is selectable only when it's 2P or 4P	
- Digital region 3 & 4 are selectable only when it's 4P	
- Fix the bug that when new firmware is upgraded, PIP and 4P windows are all VGA in	
default. Now after downloading new firmware, all input port are reset to D0 to D3 for P1 to	
P4 respectively.	
- Add user EDID RS-232 download: RS-232 User EDID command 0xee 0x76 - "S"/"s" to download 1st 128-byte EDID	
- "E"/"e" to download 1st 128-byte EDID	
- "R"/"r" to reset and disable 256-byte user EDID	
- Support custom panel timing download through Controller Utility	
- When input source is interlaced, the display vertical frequency is shown as frame rate	
instead of field rate (which is twice the frame rate) in information box.	
IP-60 web page updated	
1. Add indicating alert function in each sensor when touches the trigger level	
in Monitor status Page e.g. Internal Temp Min Value set 30, if detected	
Internal Temp is over 30, the internal temp text field will be highlighted in	
Red Colo	
2. Added Color Temp. User Item (R,G,B)	
3. Added Color Effect User	
4. Fixed VGA Port Selection	



		5. Fixed the wrong name expression (DisplayPortHDMI 1)	
		6. Remove Email Alert Page	
		7. Change HK and Europe Office Address	
		8. Change Int. Temp Min. Value to Int. Temp. Warning Value	
		9. Change Ext. Temp Min. Value to Ext. Temp. Warning Value	
		Bare PCB: 017550002-3; P/N 417550021-3	
		BIOS: U20, V1.05.00.00 (Flash F25L16PA-100PG2S)(changed)	
		U24, V6.06.0.0 (PIC32F675F512L)(no change)	
		U33, U33_20170105.bin(SST25VF020)(web page of IP-60)(changed)	
		U41, VGA/DVI DDC (checksum AD,8E)(changed)	
		U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(changed)	
		U34, HDMI(P4) DDC (checksum 7E,46) (changed)	
		U19, DP DDC (checksum 91,70) (changed)	
Jan 20, 2017	21 to 22	Release firmware V1.06.00.00 which included above non-released versions	ECN#
		- Fix the IE-2000 LVDS 4-ch panel timing	870689626
		- Change the OSD menu word from "Advance" to "Advanced".	
		Bare PCB: 017550002-3; P/N 417550022-3	
		BIOS: U20, V1.06.00.00 (Flash F25L16PA-100PG2S)(changed)	
		U24, V6.06.0.0 (PIC32F675F512L)(no change)	
		U33, U33_20170105.bin(SST25VF020)(web page of IP-60)(no change)	
		U41, VGA/DVI DDC (checksum AD,8E)(no change)	
		U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(no change)	
		U34, HDMI(P4) DDC (checksum 7E,46) (no change)	
		U19, DP DDC (checksum 91,70) (no change)	
June 7, 2017	22 to 22	To improve the transient response of panel power output	ECN#
	(unchanged)	- C27 changed from 1000pF to 33nF/25V/0603	870689651
	_	Firmware no change	
		Bare PCB: 017550002-3; P/N 417550022-3	
		BIOS: U20, V1.06.00.00 (Flash F25L16PA-100PG2S)(no change)	
		U24, V6.06.0.0 (PIC32F675F512L)(no change)	
		U33, U33_20170105.bin(SST25VF020)(web page of IP-60)(no change)	
		U41, VGA/DVI DDC (checksum AD,8E)(no change)	
		U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(no change)	
		U34, HDMI(P4) DDC (checksum 7E,46) (no change)	
		U19, DP DDC (checksum 91,70) (no change)	
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June 28,	22 to 23	Production release latest version SVX-4096 to TriView	ECN#
2018		Scalar firmware change to V1.07.00.00:	TW870688
		1. Add panel timings	032
		a. LG LM300WQ6-SLA1	
		b. NLT NL192108ACI3-02D	
		c. LG LA1340UW1-SSA3	
		d. LG LM238WR3-SSB1	
		 Add Video lock option on SW4-5 Add RS-232 commands 0x98 0x2B/0x2D, 0x92 'R' command 	
		 Add KS-252 commands 0x98 0x2B/0x2D, 0x92 K command Increase color temp range from 2300K-9300K 	
		5. Improve audio level on CN13	
		6. Change IR key detecting mechanism. Continuously pressing for POWER, OSD	
		Next/Back, PIP.	
		7. Change internal default value for Brightness and Contrast. Improve better gray	
		scale.	
		8. Check firmware checksum to determine whether update EDID.	
		IP-60 changes:	
		Bootloader change to V2.0, firmware on U24 changed to V6.11.0.0	
		Web page on U33 changed to D20180514.bin	
		1. New boot loader (V2.0) is used. Upgrade IP-60 without opening chassis.	
		2. Added sensor query command for network (TCP)	
		3. Added DHCP/Mac address/IP address query command	
		4. Added command to enable boot loader (enable firmware upgrade mode)	
		Hardware change	
		- running change to use EON, EN25QH16A-104GIP on U20 as the old part	
		F25L16PA is EOL.	
		Bare PCB: 017550002-5 Rev B; P/N 417550023-3	
		BIOS: U20, V 1.07.00.00 (Flash EN25QH16A-104GIP)(changed)	
		U24, Bootloader version V2.0 (changed)	
		U24, V6.11.0.0 (P1C32F675F512L)(changed)	
		U33, U33_20180514.bin(SST25VF020)(web page of IP-60)(changed)	
		U41, VGA/DVI DDC (checksum AD,8E)(no change)	
		U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(no change)	
		U34, HDMI(P4) DDC (checksum 7E,46) (no change)	
		U19, DP DDC (checksum 91,70) (no change)	



July 6, 2021	23 to 24	Scalar firmware on U20 change to V1.08.00.00:	ECN#
		Change details	TW870688
		(1) Add panel support :	130
		(a) Support LG LM238WR2-SPE1 (3840x2160) eDP1.2 10V panel:	
		SW3 (#1~8) ON ON OFF ON OFF ON OFF	
		SW4 (#1~6) All OFF	
		(b) Support AUO G270QAN01 (2560x1440) LVDS panel:	
		SW3(#1-8): OFF OFF ON OFF ON OFF ON OFF	
		SW4(#1-6): ON OFF OFF ON OFF OFF	
		(c) Support Panasonic VVF24P185H00 (4096x2160) LVDS panel:	
		SW3 (#1-8): ON OFF OFF ON ON ON ON OFF	
		SW4 (#1-6): ON OFF OFF OFF OFF OFF	
		(d) Support Tianma NL256204AC16-01 (2560x2048) LVDS panel:	
		SW3 (#1-8): ON-ON-OFF-OFF-ON-OFF-ON-OFF	
		SW4 (#1-6) : OFF-ON-OFF-OFF-OFF-OFF	
		(e) Support LM215UH1-SPA1 (4096x2304) eDP1.2 panel:	
		SW3(#1-8): ON-ON-OFF-OFF-OFF-OFF-OFF	
		SW4(#1-6): OFF-OFF-OFF-ON-OFF-OFF	
		(f) Support NEC NL192108BC18-06F 1920x1080@60 8bit eDP1.2 HBR panel:	
		SW3(#1-8): OFF-OFF-ON-ON-ON-ON-OFF	
		SW4(#1-6): OFF-OFF-OFF-OFF-OFF	
		(g) Support JOLED EPM216Q**** 3840x2160@60 10 bit eDP1.2 panel:	
		SW3(#1-8): ON-OFF-ON-OFF-ON-ON-ON-OFF	
		SW4(#1-6): OFF-OFF-OFF-OFF-ON-OFF	
		(2) Fix OSD Menu "Auto Source Seek" missing "c" character	
		(3) Disable the spread spectrum function and Disable the panel power output when	
		port switching trying to fix the flickering image on AUO M320QAN01.0 using	
		SW3(#1-8): ON-OFF-ON-OFF-OFF-ON-ON-OFF and	
		SW4(#1-6): All OFF setting.	
		(4) Set audio level so 75% to 100% to avoid audio quality get distorted when	
		increase the audio level above 80% volume.	
		(5) Add renaming port name feature	
		(6) Add to support User Gamma LUT.	
		(7) Fixed Color mapping when DVD Player connected to HDMI 2.0 port (P4)	
		(8) Fixed no function of some DDCCI command (Color Temp, Input Source)	
		Hardware no change	
		Deep DCD: 017550002 5 (Durning shares to Deep C): DOI 017550024 2	
		Bare PCB: 017550002-5 (Running change to Rev C); P/N 417550024-3	
		BIOS : U20, V 1.08.00.00 (Flash EN25QH16A-104GIP)(changed)	
		U24, Bootloader version V2.0 (no change)	
		U24, V6.11.0.0 (P1C32F675F512L)(no change)	
		U33, U33_20180514.bin(SST25VF020)(web page of IP-60)(no change)	
		U41, VGA/DVI DDC (checksum 6E,8E)(changed)	
		U31,37, HDMI(P2/P3) (checksum AD,DE) DDC(no change)	
		U34, HDMI(P4) DDC (checksum 7E,96) (changed)	
		U19, DP DDC (checksum 91,70) (no change)	

Prepared by: DV-HK Date: 6 July 2021