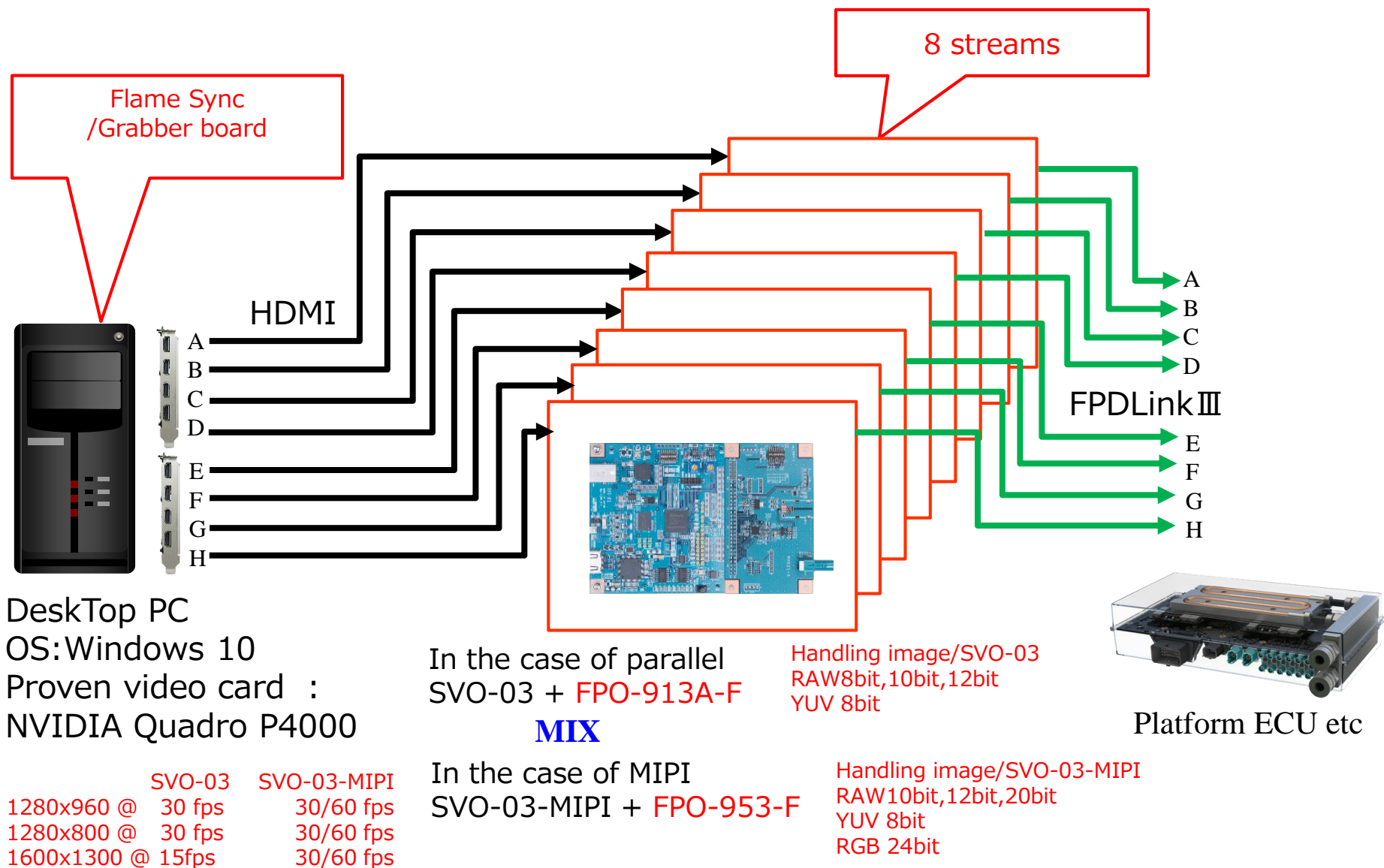


SVO-03 SVO-03-MIPI SYNCHRONIZATION

SV series

Net Vision Co.,Ltd.

CAMERA EMULATION SYSTEM CONFIGURATION



SVO-03 + FPO-913A-F

USB3.0
Power supply
Communication for setting

Synchronization connector
Frame sync

I/F
HDMI

FAKRA

I/F
FPDLinkIII

SVO-03	SVO-03-MIPI
1280x960 @ 30 fps	30/60 fps
1280x800 @ 30 fps	30/60 fps
1600x1300 @ 15fps	30/60 fps

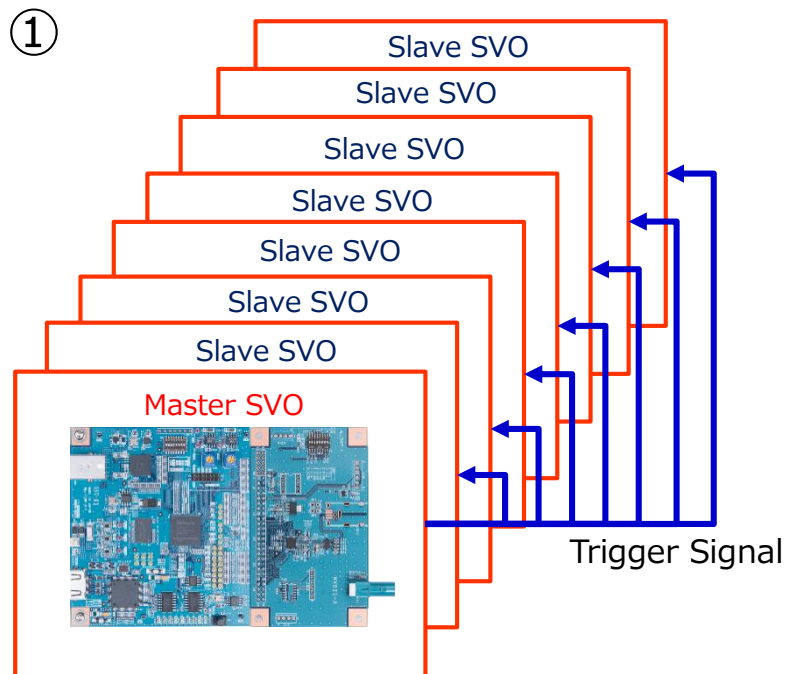
SVO-03 + FPO-953-F
or
SVO-03-MIPI + FPO-953-F

SYNCHRONIZATION FUNCTION

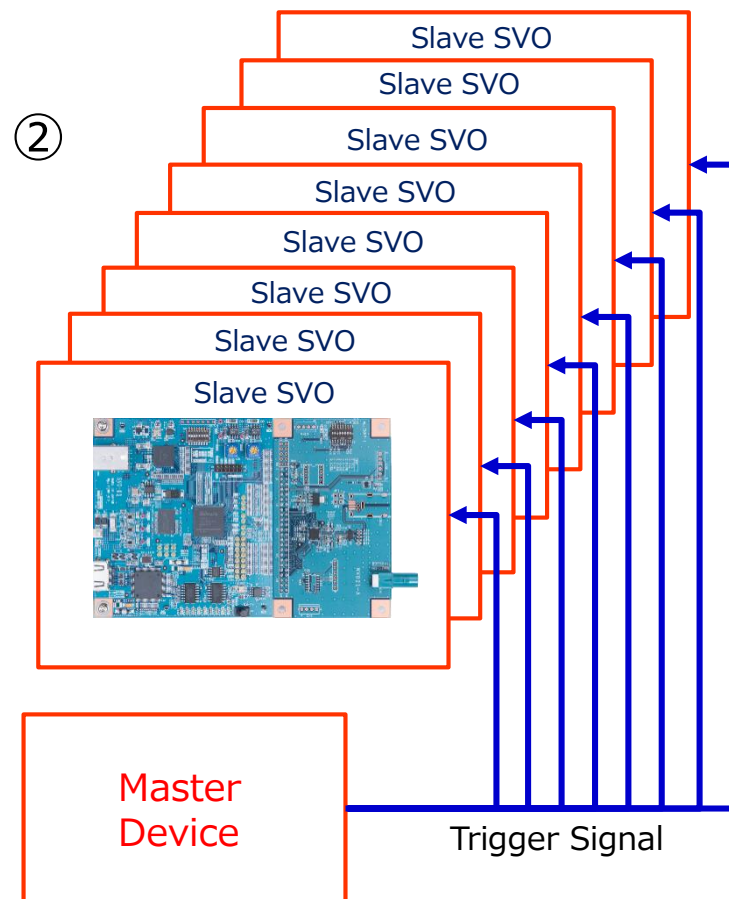
Master / Slave board schematic

① Master : 1 SVO board Slave : Other SVO boards

② Master : Other Device Slave : 8 SVO boards



OR



TRIGGER SIGNAL SPECIFICATION

Select format of external sync signal

Setting	
Mode	Start : Synchronize the output start timing with an external signal Frame : Synchronize the output of each frame to an external signal Start/Stop : Synchronize the output start / end timing with an external signal
Polarity	H Level : When the external sync signal is at H level, video frame output is enabled L Level : When the external sync signal is at L level, video frame output is enabled Pos Edge : When the external sync signal is at L-> H edge, video frame output is enabled Neg Edge : When the external sync signal is at H-> L edge, video frame output is enabled

Example

① Mode : Start, Polarity : H Level

External Sync Signal

Vsync(SVO Output)

② Mode : Frame, Polarity : H Level

External Sync Signal

Vsync(SVO Output)

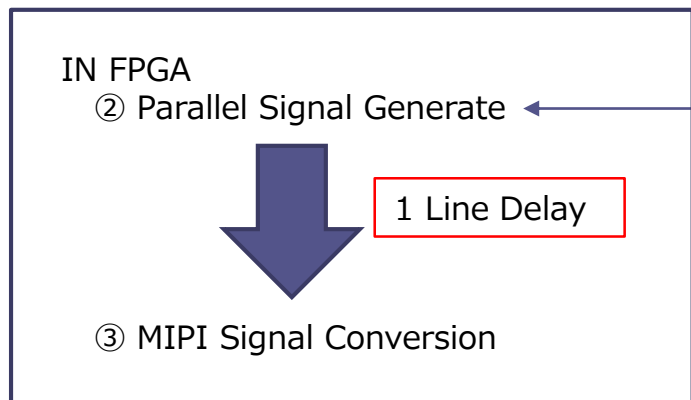
③ Mode : Frame, Polarity : Pos Edge

External Sync Signal

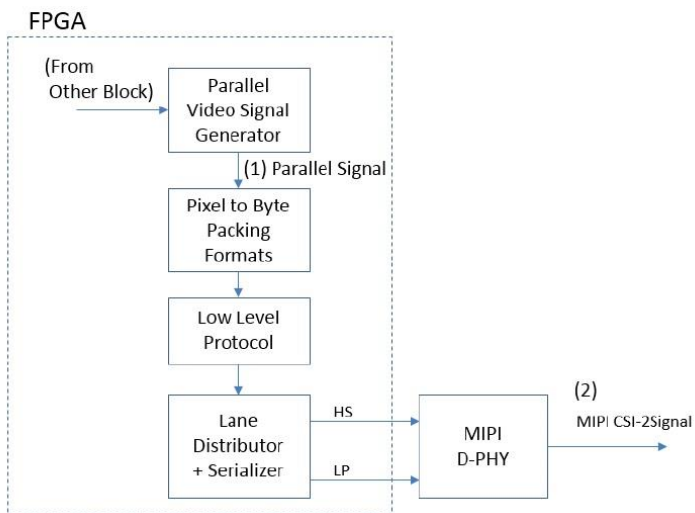
Vsync(SVO Output)

OUTPUT TIMING LATENCY①

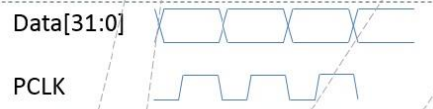
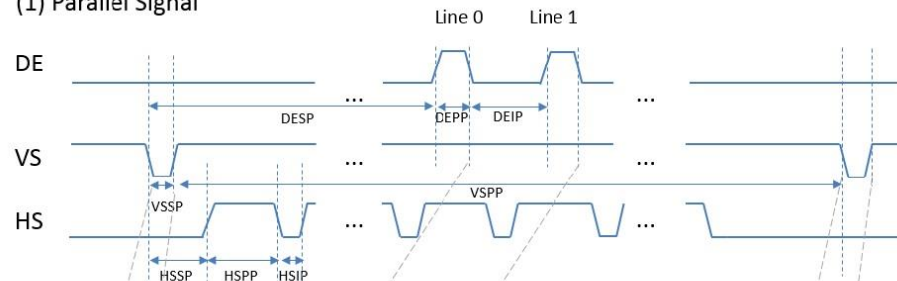
MIPI Generate Specification & Parallel / MIPI Signal Timing



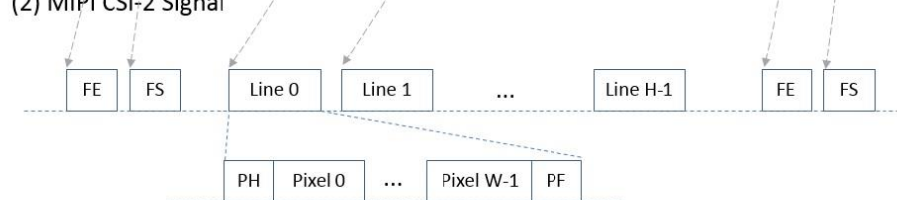
① Trigger Signal Input



(1) Parallel Signal



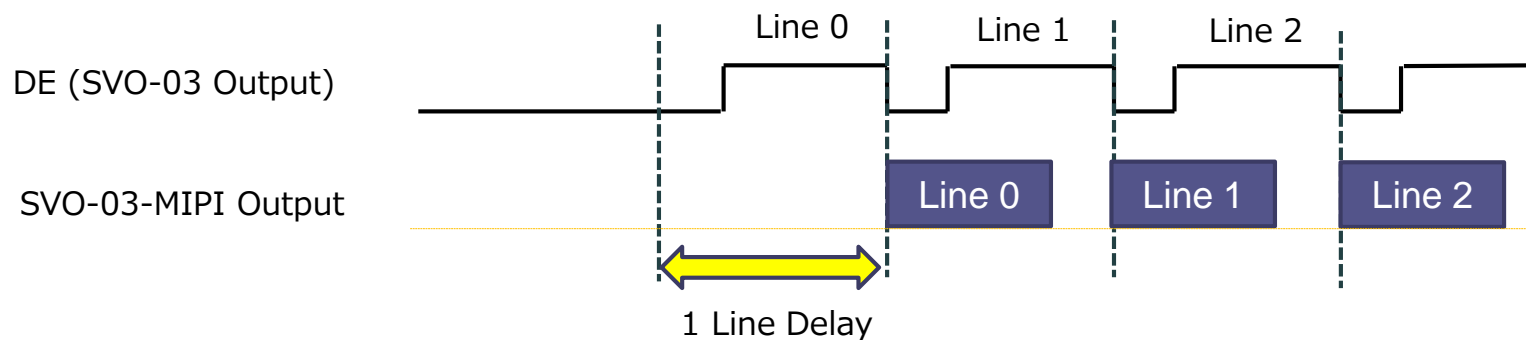
(2) MIPI CSI-2 Signal



– FE: Frame End, FS: Frame Start, PH: Packet Header, PF: Packet Footer

OUTPUT TIMING LATENCY②

SVO-03 + FPO-913 / SVO-03-MIPI + FPO-953 Output Latency



- Mix SVO-03 and SVO-03-MIPI

+

- Input trigger signal simultaneously



The output of SVO-03-MIPI is delayed by 1 line