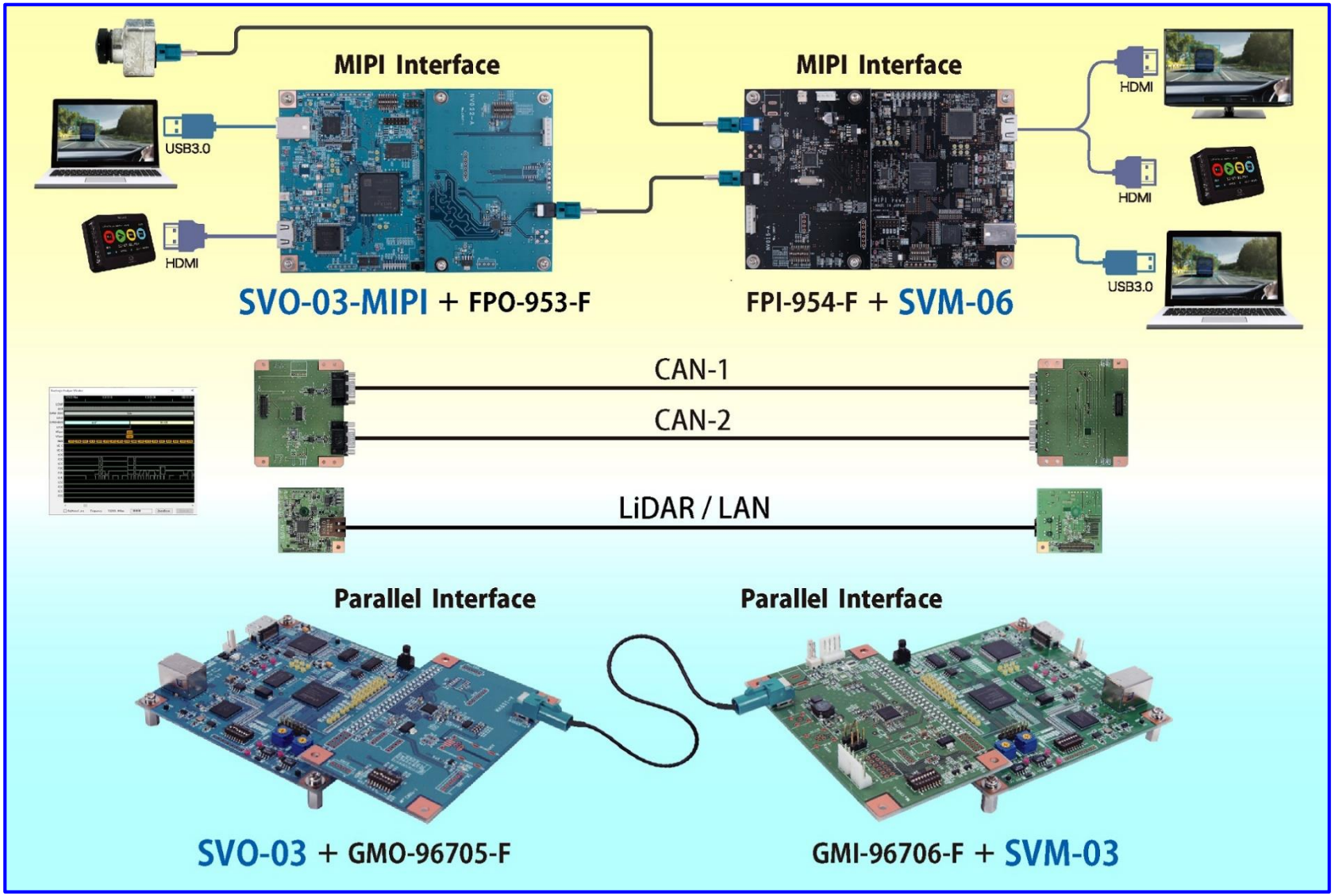


Camera inspection
Parallel MIPI-CSI-2 Jig

SerDes
FPDLinkⅢ GMSL GVIF2

Multi Interface
USB3.0 HDMI CAN/LiDAR

TABLE OF CONTENTS

SerDes board type number rule

FP I - 914A – F - C (Manufacturing name NV012-C)

1. Interface
   FP: FPD-Link III GM:GMSL, GV:GVIF2
2. I/0 direction
   I:Input, O:Output
3. Integrated SerDes IC number
   914A:DS90UB914A, 96706:MAX96706GTJ
4. Mounting connector
   F:FAKRA, H:HSD, M:MX
5. Revision

SV series board type number rule

SV M- 03 – W (Manufacturing name SVM-03W)

1. Series name
   SV:Smart Vision
2. I/0 direction
   I:Input, O:Output, M:Monitor
3. Revision or model number
   03 :Third generation
4. Function
   W:2CH,G:RGB888,MIPI:MIPI

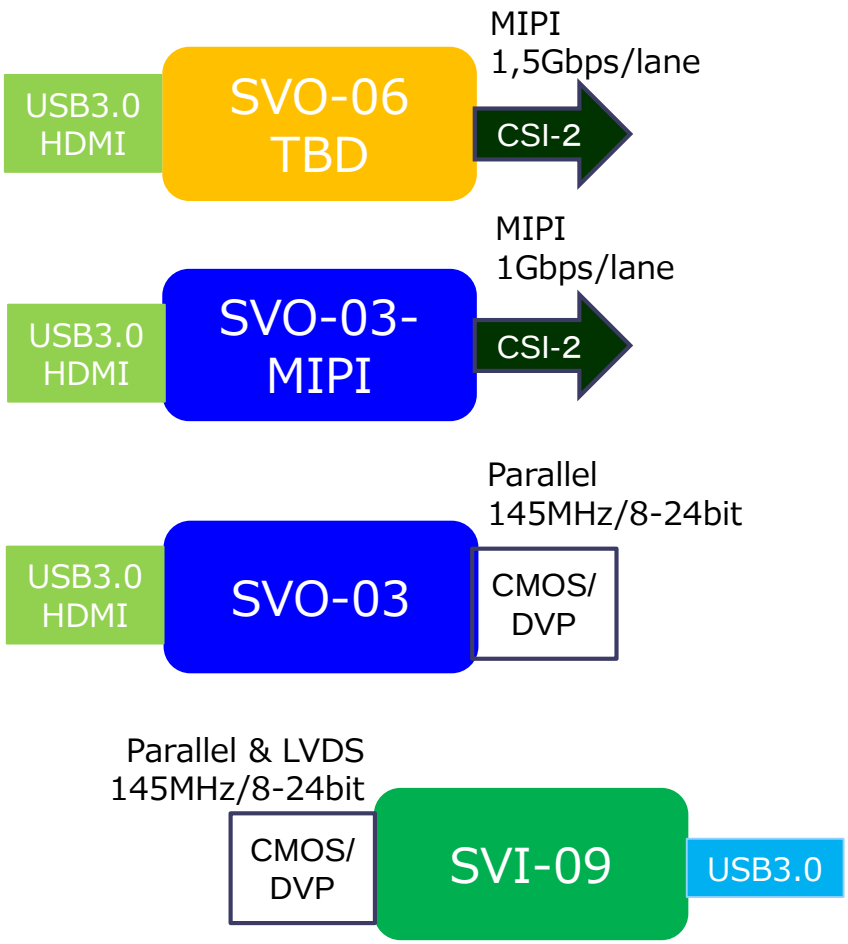
COMPANY PROFILE

- Location: 3-8-6 Kanda Kajicho, Chiyoda-ku, Tokyo
- Established: March 6, 2001
- Capital: 10 million yen
- Corporate philosophy: In niche areas, we will propose products that aim to be the best in the world.
  - We have established a system that allows us to develop and produce products consistently from board to FPGA, software and firmware.
- Representative Director: Hiroshi Kokufu
- Employees: 12 URL: https://www.net-vision.co.jp/
- Business field: Manufacture and sale of electronic products
- In-house product: Image inspection SV series
- Main customers
  - Panasonic, Sony, Denso, Kyocera, Aisin Seiki, Clarion , Mitsubishi Electric, SMK , Toyota Motor, SUBARU,Sharp etc.

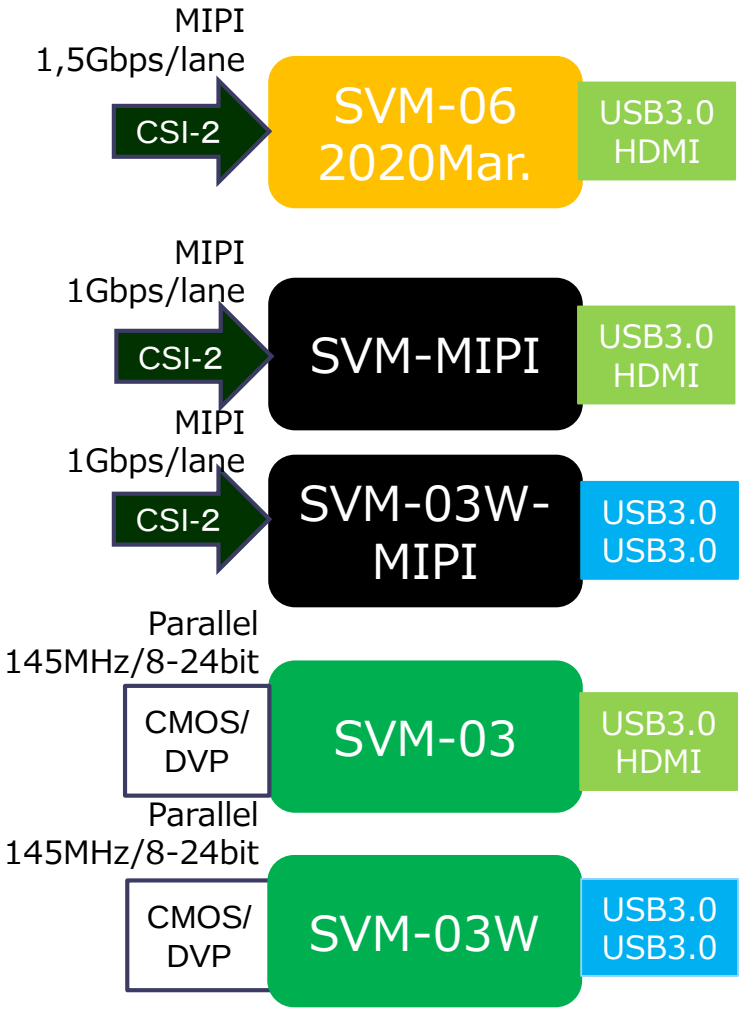
mipi® member

SV SERIES PORTFOLIO

Vendor Class driver/USB



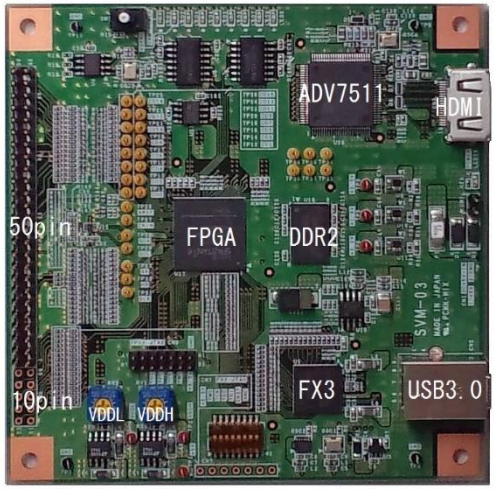
UVC driver/USB



SVM SERIES

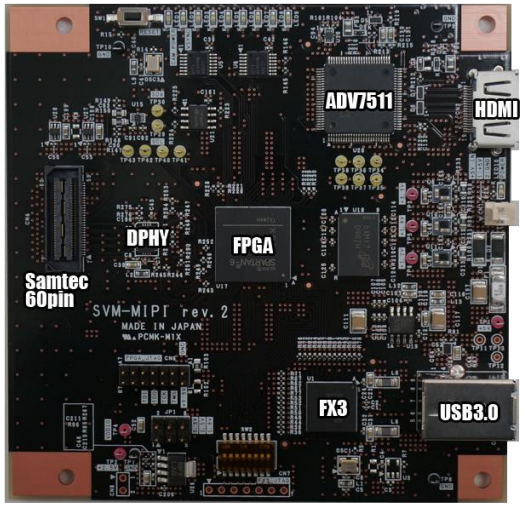
2007	2013	2017	2020
SVM-01/VGA Parallel	SVM-03/HDMI Parallel	SVM-MIPI 1Gbps/lane	SVM-06 TBD 1.5Gbps/lane

SVM series is a device for displaying and recording CMOS sensor and in-vehicle camera images. Two types are available: parallel and MIPI.



Parallel monitor board SVM-03

- Input: Parallel
  - YUV-8 & 16, RAW-10 & 12, RGB-8 & 24
- Output: PC (AVI & FRM) or HDMI



MIPI monitor board SVM-MIPI

- Input: MIPI
  - YUV-8, RAW-8 & 10 & 12 & 20, RGB-24
  - Output standard: MIPI CSI-2 video signal (1 to 4 Lanes)
  - Supports up to 4 Lanes at 1Gbps
  - CSI-2 Clock Rates From 100MHz to 500MHz
  - Effective pixel data rate: up to 2.4Gbps
- Output: PC (AVI & FRM) or HDMI

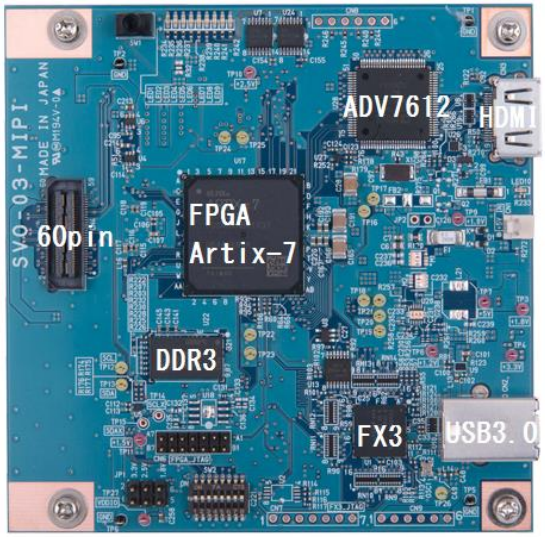
SVO SERIES

2006	2014	2018	2020
SVO-01/USB2.0	SVO-03/USB3.0	SVO-03-MIPI	SVO-06
Parallel	Parallel	MIPI	MIPI-TBD

SVO series is a device that reproduces recorded images and CG images as real images. Two types are available: parallel and MIPI.

Parallel generator SVO-03

- Input: PC (AVI & FRM) or HDMI
- Output: Parallel
  - YUV-8 & 16, RAW-10 & 12, RGB-24



MIPI generator SVO-03-MIPI

- Input: PC (AVI & FRM) or HDMI
- Output: MIPI
  - YUV-8, RAW-10 & 12 & 20, RGB-24
  - Output standard: MIPI CSI-2 video signal (1 to 4 Lanes)
  - Supports up to 4 Lanes at 1Gbps
  - CSI-2 Clock Rates From 100MHz to 500MHz
  - Effective pixel data rate: up to 2.4Gbps

SVI SERIES

2004 SVI-01/USB2.0 Parallel

2011 SVI-06/USB3.0 Parallel

2018 SVI-09/USB3.0 Parallel&LVDS

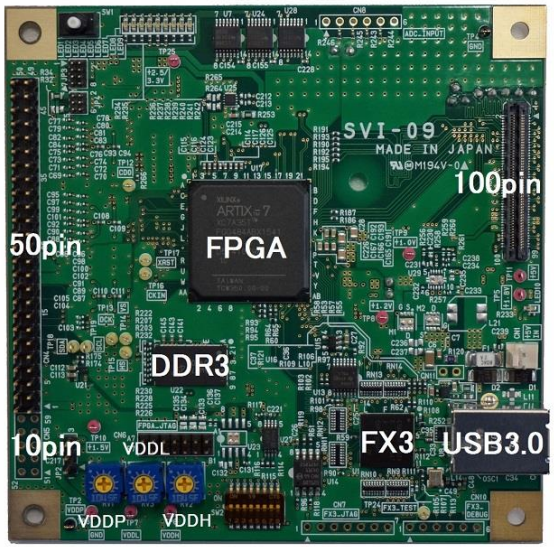
SVI series, CMOS sensor, display an on-board camera image, it is a device for recording. It uses a frame memory and is ideal for camera inspection.

Parallel recorder SVI-09

- Input: Parallel (60-pin header)
  - YUV-8 & 16, RAW-10 & 12, RGB-8 & 24
- Input: LVDS (100 pin connector)
  - Directly connected to FPGA
- Output: PC (AVI & FRM)
- PC driver: Vendor class and UVC
  - Both modes have a frame memory use mode
- Contract development results
  - MIPI & Parallel sensor 2CH input, image conversion (size, format, etc.), 2CH-Parallel sensor emulation

LAN (UDP) connection board: LAN-IF

- Uses 100-pin LVDS connector



SVI-09

LAN-IF board

FPDLINKⅢ INTERFACE BOARD

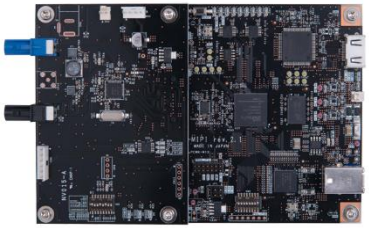
FPO and FPI series products conform to the FPDLink III standard of TI's in-vehicle camera transmission standard. These boards are used in connection with the SV series.

Serializer board(Minimum order quantity: 10set)

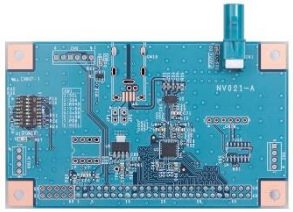
- DS90UB913A board FPO-913A-F (NV-021)
  - Compatible SV board: SVO-03
  - Compatible connector: FAKRA (HSD & MX connector on order)
- DS90UB953 board FPO-953-F (NV-022)
  - Compatible SV board: SVO-03-MIPI
  - Compatible connector: FAKRA (HSD & MX connector on order)

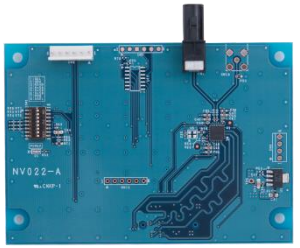
Deserializer board(Minimum order quantity: 10set)

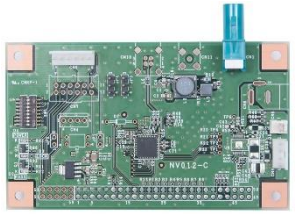
- DS90UB914A board FPI-914A-F (NV-012)
  - Compatible SV board: SVM-03, SVI-09
  - Compatible connector: FAKRA (HSD & MX connector on order)
- DS90UB954 board FPI-954-F (NV-015)
  - Compatible SV board: SVM-MIPI
  - Compatible connector: FAKRA (HSD & MX connector on order)

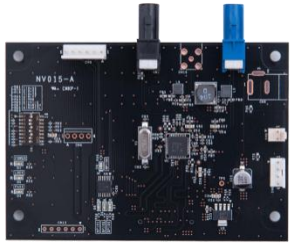


FPI-954-F+SVM-MIPI







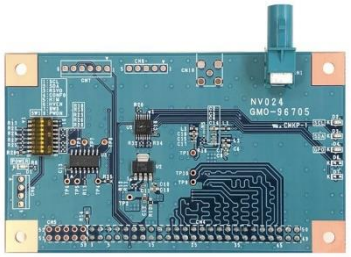


GMSL INTERFACE BOARD

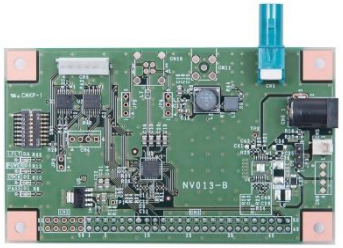
GMI-96706-F+SVM-03

GMO and GMI series are products that meet the GMSL standard for MAXIM's in-vehicle camera transmission standard. These boards are used in connection with the SV series.

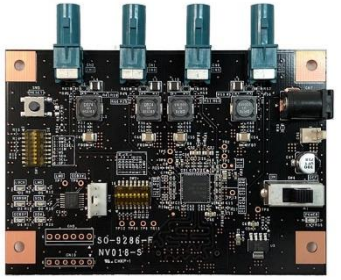
Serializer board (Minimum order quantity: 10set)



- MAX96705 board GMO-96705-F (NV-024)
  - Compatible SV board: SVO-03
  - Compatible connector: FAKRA (HSD & MX connector on order)
- MAX96707 board GMO-96707-F (NV-023)
  - Compatible SV board: SVO-03
  - Compatible connector: FAKRA (HSD & MX connector on order)



Deserializer board(Minimum order quantity: 10set)



- MAX96706 board GMI-96706-F (NV-013)
  - Compatible SV board: SVM-03, SVI-09
  - Compatible connector: FAKRA (HSD & MX connector on order)
- MAX9286 board GMI-9286-F (NV-018)
  - Compatible SV board: SVM-MIPI
  - Compatible connector: FAKRA (HSD & MX connector on order)

SV SERIES PRODUCT LIST

- Monitor board: SVM-03: @ 125,000 yen
  - Main board-128MB memory with soft CD
- MIPI monitor board: SVM-MIPI: @ 198,000 yen
  - Main board-128MB memory with soft CD
- Parallel generator: SVO-03: @ 168,000 yen
  - Main board-128MB memory with soft CD
- MIPI generator: SVO-03-MIPI: @ 198,000 yen
  - Main board-128MB memory with soft CD
- Parallel recorder: SVI-09: @ 198,000 yen
  - Main board-256MB memory, soft CD
- SerDes boards(Minimum order quantity: 10set)
  - DS90UB913A board FPO-913A-F :@46,000yen
  - DS90UB953 board FPO-953-F :@46,000yen
  - DS90UB914A board FPI-914A-F :@46,000yen
  - DS90UB954 board FPI-954-F :@46,000yen
  - MAX96706 board GMI-96706-F :@46,000yen
  - MAX9286 board GMI-9286-F :@69,000yen
- SDK: Software Development Kit: @ 298,000 yen / site license
  - Vendor for a class: Windows, for UVC: Windows & Linux

＊消費税別