



Product Change Notice

- **Purpose**

Sharp Corporation is announcing immediate EOL of **GP2AP01VT10F** time-of-flight (tof) sensor due to EOL of VCSEL emitter used by this sensor.

Sharp is recommending the new tof sensor **GP2AP02VT20F** as a replacement.

- **Schedule**

June 2021 - Samples and software for the new part number GP2AP02VT20F will be available.

July 2021 – Production of GP2AP02VT20F begins

September 2021 – First shipment of GP2AP02VT20F

- **Additional Details**

Refer to pages that follow for more details about this PCN from Sharp Corporation.

If you have any questions concerning this product notification, please contact your Socle representatives at: Socle_Sales_NA@socle-tech.com

SHARP

Be Original.

Notification

**GP2AP01VT10F EOLに伴う
GP2AP02VT20Fへの機種切替のお願い**

**Request for Model Change from
GP2AP01VT10F(EOL)
to GP2AP02VT20F**

Sharp Fukuyama Semiconductor Co., Ltd.

Semiconductor Business Unit

June 8, 2021

1. 変更点要旨 Summary of Changes

- GP2AP01VT10FのEOL致します。代替機種GP2AP02VT20Fへの変更ご協力をお願い申し上げます。
GP2AP01VT10F will be EOL. We would appreciate your cooperation to change to the substitute model GP2AP02VT20F.

<変更理由/Reason for the change>

- GP2AP01VT10Fで搭載中のEmitter(VCSEL)素子がEOLとなりました。/
Emitter (VCSEL) part embedded in GP2AP01VT10F was EOL.

<Notification>

- 距離特性上は#02VTの方が#01VTと比べて優位となりますが、外形サイズ、フットプリントのH/W面の変更、お客様にてMCUへ組込んで頂くS/Wの変更が必須となります。/
02VT has better distance characteristics over 01VT. However, there are hardware changes to sensor's size and footprint, and modification of software to be incorporated into customers' MCU will be required.

<目次/Outline>

- 2. 変更点の説明 / Description of Changes (page 3)
- 3. GP2AP02VT20Fへの切替スケジュール / Schedule for Switching to GP2AP02VT20F (page 4)

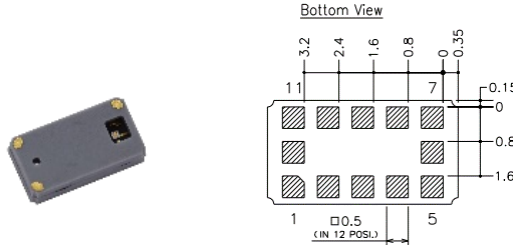
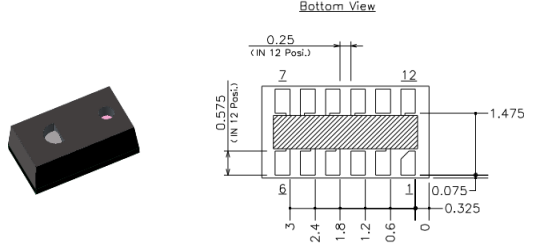


2. 変更点の説明 Description of Changes

GP2AP01VT10FのEOLに伴い、代替GP2AP02VT20Fへ変更となります。機種変更となりますのでソフト変更も必要となります。センサーの仕様が下表のとおり変更となります。

GP2AP01VT10F will be substituted with GP2AP02VT20F due to EOL. Software modification will be required due to model change. The differences in sensor's characteristics are shown in the table below.

比較表 Comparison Table

Model	GP2AP01VT10F	GP2AP02VT20F	
Distance measurement range(Gray card 17%)	5cm~70cm	4cm~120cm	○
Repeatability (3σ) (Gray card 17%)	7%	5%	○
Max range (Gray card 17%)	70cm	120cm	○
Strength against ambient light	70klx	129klx	○
I2C interface	400kHz	1MHz	○
Light emitting element	LD(VCSEL/940nm)	LD(VCSEL/940nm)	—
Package size	4.4×2.2×1.0mm	4.0×2.2×1.5mm	—
Ranging speed	33ms	33ms	—
Average current consumption10Hz	30mA	10mA	○
The amount of communication per data(I2C)	47 word	213 word	△
User Software (ROM/RAM) (for PIC18F26K22)	23kB / 400B	35kB / 350B	△
Appearance / Terminal position	 <p>Bottom View diagram showing dimensions: 3.2, 2.4, 1.6, 0.8, 0.35, 0.15, 0.8, 1.6, 1, 5, 0.5 (IN 12 POS.), 7.</p>	 <p>Bottom View diagram showing dimensions: 0.25 (IN 12 Pos.), 0.575 (IN 12 Pos.), 1.475, 0.075, 0.325, 7, 12, 3, 2.4, 1.8, 1.2, 0.6, 1, 0.</p>	—



3. GP2AP02VT20Fへの切替スケジュール Schedule for Switching to GP2AP02VT20F

現行のVCSELの追加手配が出来ない状況のため、早々のご評価とご承認をお願い致します。
切替機種GP2AP02VT20Fは最短で21年9月から量産対応計画ですが、
納期詳細についてはお問い合わせ頂きたくお願い申し上げます。

We seek your cooperation to please comply with the following schedule and start evaluation early as we are unable to acquire additional arrangement for the current VCSEL.
Substitute model GP2AP02VT20F is planned to be mass-produced from September 2021 at the earliest. Please contact us for details on delivery schedule.

GP2AP02VT20F 標準切替スケジュール Schedule

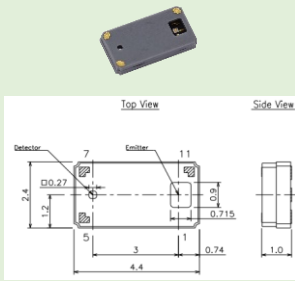
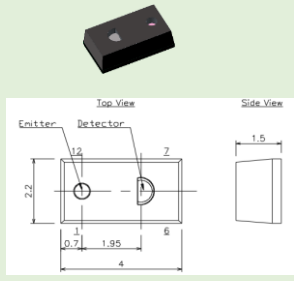
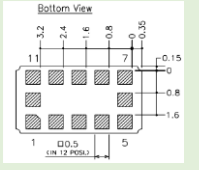
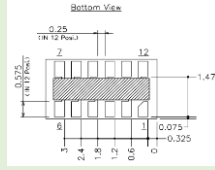
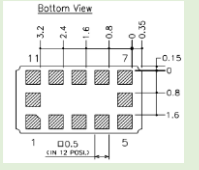
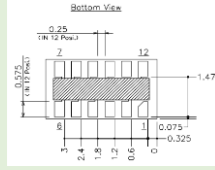
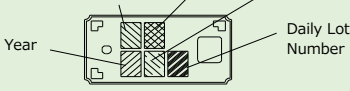
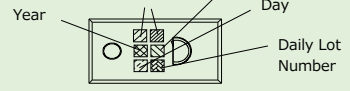
	6月 June	7月 July	8月 August	9月 September
ユーザー様 USER		ご評価 evaluation ~7/30		9月納入分より 現行品から切替 Delivery for Sept onwards is switched to new model
SFS	6/8~通知/ サンプル及びソフト配布 Notification /Submit the sample and software	生産切替開始 Production start		倉入れ Delivery



ToFセンサ GP2AP01VT10FからGP2AP02VT20F変更に伴う比較資料

Comparison Document for ToF Sensor Model Change from GP2AP01VT10F to GP2AP02VT20F

SHARP Fukuyama Semiconductor Co., Ltd.
Semiconductor Business Unit
シャープ福山セミコンダクター株式会社
セミコンダクター事業部

		従来品 Current Product	変更品 Modified product	
1	取引品番 Business Model No.	GP2AP01VT10F	GP2AP02VT20F	
2	SHARP 社内管理用品番 SHARP Internal Model No.	GP2AP01VT1F4	GP2AP02VT2F6	
3	VCSEL 原産国/生産工場 VCSEL Country of Origin / Manufacturing Location	台湾 Taiwan	韓国 Korea	
4	Optical IC 原産国/生産工場 Optical IC Country of Origin / Manufacturing Location	同 ー S A M E		
5	発光素子 Emitter	素材 Material	同 ー S A M E	
		サイズ Size	0.26mm□ × t 0.15mm	0.23mm□ × t 0.15mm
	受光素子 Detector	素材 Material	同 ー S A M E	
		サイズ Size	2.74mm×1.06mm × t 0.2mm	2.3mm×1.15mm × t 0.15mm
6	パッケージ Package	セラミック (中空構造) Ceramic (No resin)	モールド (樹脂封止) Mold (Resin)	
7	その他 材料 Other materials	同 ー S A M E		
8	作業 Workers	同 ー S A M E		
9	生産・検査設備 Production・Inspection Equipment	同 ー S A M E		
10	電気的特性(絶対最大定格含む) Electronic Spec. (Including absolute maximum rating.)	同 ー S A M E		
11	信頼性 Product Reliability	同 ー S A M E		
12	外形 Outline Dimension	4.4 mm×2.2 mm × t 1.0mm	4.0 mm×2.2 mm × t 1.5mm	
				
				
13	裏面電極 Terminal position			
	ロットNo.標記 Description of Lot No.	Model Number Month Day Year Daily Lot Number 	Model Number Month Day Year Daily Lot Number 	
14	包装仕様・ラベル標記ルール Package Spec. / Description of Label	同 ー S A M E		