



# Product Change Notification

**PCN 5/2023**

**Refers to: VisionSOM-6ULL v1.2**

**Issue Date: December 2023**

**Effective Date: December 2023**

**Title: Replacing boot configuration resistors with electronic configuration (e-Fuses)**

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## Part Numbers Affected

Board Models	Version	New Version
VisionSOM-6ULL	1.2	1.2

### Notes:

- The PCN covers VisionSOM-6ULL (SLS16) modules version with eMMC or MicroSD memories. Modules with NAND Flash memories have not changed at all.
- The ordering codes of affected parts are:

SLS16xx\_xxxC\_xxxR\_yyGE\_xxx\_x, where

yy = 04, 08, 16 or 32

and

SLS16xx\_xxxC\_xxxR\_SD\_xxx\_x

## Notification

Pinout Compatibility <input type="checkbox"/>	Revision Change <input type="checkbox"/>	
Design Change <input type="checkbox"/>	SW compatibility <input type="checkbox"/>	Other <input checked="" type="checkbox"/>

## Cause

Resistors configuring the processor's boot procedure limited the functionality of the selected GPIO (LCD\_DATAxx) lines, which complicated the design of the carrier board.

## Notification Description

The following lines of GPIO in modules VisionSOM-6ULL v 1.1 are equipped with pull-up (PU)/pull-down (PD) resistors:

GPIO line	Resistor value	PU/PD
LCD-DATA0	10k	PD
LCD-DATA1	10k	PD
LCD-DATA2	10k	PD
LCD-DATA3	10k	PD
LCD-DATA4	10k	PD
LCD-DATA5	10k	PU
LCD-DATA6	10k	PU
LCD-DATA7	10k	PD
LCD-DATA8	10k	PD
LCD-DATA9	10k	PD
LCD-DATA10	10k	PD
LCD-DATA11	10k	PU
LCD-DATA12	10k	PD
LCD-DATA13	10k	PU
LCD-DATA14	10k	PD
LCD-DATA15	10k	PD

LCD-DATA16	10k	PD
LCD-DATA17	10k	PD
LCD-DATA18	10k	PD
LCD-DATA19	10k	PD
LCD-DATA20	10k	PD
LCD-DATA21	10k	PD
LCD-DATA22	10k	PD
LCD-DATA23	10k	PD

These resistors configured the boot procedure stored by default in internal ROM MPU memory.

In modules VisionSOM-6ULL v 1.2 (with two Flash memory types: eMMC or MicroSD) all these resistors are removed and boot configuration is stored in e-Fuse internal OTP MPU memory (instead of external resistors). Thanks to this user can freely use GPIO (LCD-DATAxx) in both direction without the need to use special solutions on the carrier board.

### Impact on target application

The module user can use the GPIO (LCD-DATAxx) line without any restrictions.

### Workaround

None - unnecessary.

### HW/SW Changes Requirements

None.