



Product Change Notification

PCN 4/2023

Refers to: VisionSOM-6ULL v1.1

Issue Date: August 2023

Effective Date: September 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	1.1	1.2

Notes:

- The PCN covers VisionSOM-6ULL (SLS16) modules version with eMMC memory only. Modules with other Flash memories have not changed at all.
- The ordering code of affected parts is:
SLS16xx_xxxC_xxxR_yyGE_xxx_x, where
yy = 04, 08, 16 or 32

Notification

Pinout Compatibility <input type="checkbox"/>	Revision Change <input checked="" 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 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

Ad. 1. The module user can use the GPIO (LCD-DATAxx) line without any restrictions.

Workaround

None - unnecessary.

HW/SW Changes Requirements

None.