



## CHANGELOG

### STM32 EMBEDDED 7" DISPLAY

Rev.1.0  
2024-05-20

This document is applied for the Riverdi STM32 embedded 7.0" series:

PRODUCT NAME	DESCRIPTION
RVT70HSSNWN00	IPS, 7.0", 1024x600, 1000cd/m <sup>2</sup> , STM32, no touch panel,
RVT70HSSFWN00	IPS, 7.0", 1024x600, 1000cd/m <sup>2</sup> , STM32, no touch panel, metal frame
RVT70HSSNWC00-B	IPS, 7.0", 1024x600, 850cd/m <sup>2</sup> , STM32, uxTouch, optical bonding
RVT70HSSNWC00	IPS, 7.0", 1024x600, 800cd/m <sup>2</sup> , STM32, uxTouch, air bonding
RVT70HSSNWCA0	IPS, 7.0", 1024x600, 800cd/m <sup>2</sup> , STM32, aTouch, air bonding
RVT70HSSFWCA0	IPS, 7.0", 1024x600, 800cd/m <sup>2</sup> , STM32, aTouch, air bonding, metal frame



1. REVISION RECORD

REV NO.	REV DATE	CONTENTS	REMARKS
1.0	2024-05-20	First Release	



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## 3. PCB Rev. 1.3

- The ADC1 IN1N\_P and ADC3 IN1N\_P were re-routed to function differentially.
- LSE X2, C32, and C33 were added to ensure the proper functioning of the RTC.
- The connection of USR\_BTN2 to Boot was established, along with the removal of the boot resistor R67.
- USR\_BTN2 is connected to PC0 of MCU.
- The 1.27mm backlight select jumpers were replaced with PCB bridges for improved configuration.
- Footprints for U5 and SICxx (DC-DC converter) were meticulously verified and adjusted.
- An ESD diode (D20) was integrated on SWD for enhanced protection.
- The introduction of new capacitors C34 and C35 was effected to enhance the input filter circuit and address EMI concerns.
- R70 was incorporated to bolster the EMC performance for LAN ADDON.
- R69 was added to secure the input enable for the DC-DC converter.
- L12 was modified from 6.8uH to 10uH, C51 was adjusted from 4.7uF to 470nF, and C52 was omitted due to alterations in the backlight driver.
- C129 was eliminated due to space constraints and its non-critical necessity.
- Changed USR\_BTN2 resistor from R52 10k to 1k
- Changed the connection of CTP INT from PH3 to P111 of MCU.

## 4. PCB Rev. 1.2

- Verified the presence of all spacers Footprints within the GTP.
- Inspected and adjusted the footprint of U5, SICxx (DC-DC converter).
- Evaluated the footprint of L3;
- Evaluated the footprint of L1;
- Established connection of PB12 USB ID to USB moxex connector, now designated as PC0.

## 5. PCB Rev. 1.1

- Corrected the pin numbering on the RS485 connector.
- Updated the logo to the latest version.
- Incorporated series resistors for the 7" and 10.1" displays.
- Modified the footprint of the CAN ESD diode to feature a wider solder path.
- Expanded the backlight SOT23 to include a 6th pin for potential future use.
- Introduced mux resistors to PB3 to enable SWO functionality.
- Included a PWR EN pin for the LAN addon.
- Updated footprints for components D22, D25, and PESP1CAN-UX.
- Transitioned to using IS42S32200L-6BLI for a broader temperature range.
- Labeled pin numbers for the POE ADDON connectors (U9A, U9B).
- Changed the MCU to STM32H757XIH6.
- Incorporated a battery holder component.
- Increased the maximum input voltage to 48.0V.
- Implemented BOOT MODE functionality.