

# **Firmware Program Release Notes**

## **Overview**

Program Type (General or Customized)	General
Applicable Receiving Card	A5sPlus
PCB Version	S6C_A0/A4/A6

### **Chip List**

Program Package	Driver IC	Decoding Chip	Note
DATA_A5sPlus_V4.9.7.0	MBI series: MBI502x, MBI503x, MBI5041(B), MBI5042(B), MBI5043, MBI505x, MBI5124 (excluding MBI5124DPWM), MBI5125(excluding MBI5125DPWM), MBI515x, MBI5252, MBI5353,	74HC138, 74HC595, RT5953, RT5958, SM5266, ICN2013, ICN2018, ICN2019	
	MBI5353B SUM series: SUM20167, SUM2017(T), SUM2028,		
	SUM203x, SUM213x MY series: MY9266, MY9269, MY9366, MY9862, MY9868		
	ICN series: CN2027, ICN2028, ICN2038S, <b>ICN2055,</b> ICN2065, IC2055s, ICN1069, ICN1065s		
	SM series: SM16158, SM16159, SM16207, SM16227, SM16237, SM16259		
	Others: TLC5958, TLC59581, SC8060, common chips		

### **Features**

Supported Features	Note
Max load capacity: 512×384 pixels (PWM, Shixin PWM IC); 384×384 pixels (common, Shixin common IC)	For the module design, irregular layouts, such as column scanning, folding, or skipping pixels, can impact the maximum load, typically causing variations of below 15%. Please contact NovaStar support team if you have any questions.
Up to 1/64 scan	
Up to 32 groups of parallel data.	Refer to logical load capacity.

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Supported Features	Note	
64 groups of serial data (expandable to 128 groups of serial	Support 8, 16, or 32 groups of parallel data.	
data)	Support 16, 32, or 64 groups of serial data.	
	Support dual clock extension by default.	
Color management		
18bit+		
Pixel level brightness and chroma calibration		
Quick seam correction	Support displaying test pattern when there is no signal source.	
Low latency	Common chips do not support low latency, and LS99XX series chips do not support low latency either. DCLK continuous chips need to be customized to support low latency.	
3D	Load capacity reduced by half.	
Individual gamma adjustment for RGB		
90° image rotation		
Display of 3-color 16-point serial input		
Smart module	Dedicated firmware required	
Automatic module calibration		
Stable uploading of calibration coefficients	Calibration acceleration supported	
Quick uploading of calibration coefficients		
Module flash management		
One click to apply calibration coefficients in module flash		
Mapping1.1		
Settings of a stored image in the receiving card		
Temperature & voltage monitoring		
Cabinet LCD	Support for a 5-Pin LCD	
Bit error detection	No checking for errors when the Ethernet cable is unplugged.	
Status detection of dual power supplies		
Firmware program readback		
Configuration parameter readback		
Dual card backup and status monitoring	Supports seamless switching (Note: The 1065/1063/LS99 series ICs do not support seamless	

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Supported Features	Note
	switching)
Loop backup	Supports seamless switching (Note: The 1065/1063/LS99 series ICs do not support seamless switching)
Dual backup of configuration parameters	
Dual program backup	
No rectangle restriction	Work with specific sending cards.
Added adjustable EMC.	Require working with NovaLCT 5.4.8 or later.
10bit/12bit input source	Does not support enabling 10/12-bit when working with COEX card-based controllers. Other series can support this but with half the load capacity.

### **Others**

- 1. Removed the brightness adjustment feature in grayscale preferred mode.
- 2. Fixed the brightness reduction issue for ICN2053 when exceeding 13-bit (after the fix, brightness is enhanced to meet client application needs).
- 3. Added support for active-low gamma on DP3264, DP3265, and SM16389SF.
- ICN1063 (ICN2263) and ICN2152 do not support the deal pixel removal and require customization for support. (ICN2152: A5sPlus\_V4.8.2.38; ICN1063 (ICN2263): A5sPlus\_V4.8.20.38)
- 5. ICN1063 (ICN2263) only supports active-low gamma and must be used with NovaLCT version 5.6.0 or later.
- 6. SM16389SF, SM16609, and SM16169SH (SM16380SH) do not support extended attribute special modes (photo optimization) and require a custom program for support.
- 7. Version V4.9.7.7 uses the LS E0 version of the kernel.
- 8. Added support for using image files for packaging.
- 9. Does not support the display of 3-color 1-point serial input and requires a custom program for support.
- 10. Supports program swapping for dual-card backup in both new and old setups.
- 11. For dual-card backup, the primary and backup programs must be identical during application. Discrepancies may cause display issues.

### V4.9.7.0 Updates

New Features	
•	None
Improvements	
Enhanced interference resistance capability.	
Bug Fixes	
Fixes known issues.	