Mooncell

C10 Receiving Card

Specification V3.8

Shenzhen Mooncell Electronics Co., Ltd

1 Product Overview

Product Introduction

Mooncell C10 is a small sized & high-end receiving card that independently researched and developed by Mooncell, the maximum loading capacity could reach up to 1024 pixels; with its strong processing ability,super reliability and its high competitive price,the product has been widely used and loved by the customers. The size of the C10 Card is quite small: 85mm x 12mm, that's the smallest card of its kind among its rivals in the industry, saving a lot more space, using less external cables, simplifying the design of the led display structure,reducing the difficulty of the design, helping customer to achieve the unprecedented innovative designs.

Product Features

- It features the small size and thickness, saving a lot more space for the narrow cabinet and space of the led strip(bar).
- The output features the universal 2.0mm connector, with high stability and reliability.
- It features the advanced image processing core, which has greatly improved the performance of the displaying.
- With strong Led Driver IC compatibility, supporting the driving of

all chips.

- It supports a safe upgrading.
- It supports arbitrary offset, the contents could be arbitrary rotated, so that to support the connection of the special-shaped led displays.
- It reduces the quantity of the cables and connectors that will be used, simplifies the structure design of the led screen. The signal transmission will be via just the 2core Cat5 twisted pair cable,which could combine the wiring of the led display signal and power supply into just one design. And the external cascading connection line changes from the traditional 2 in & 2 out to 1 in & 1 out.
- It features a fully enclosed design, simplify the design, improve the EMC and help to pass the EMC Certifications.

Application Scenarios

It could be widely used for LED Strip Screens,Film Screens, Glass Screens, Grid Screens, Lighting Screens and other application scenarios with strict space requirements

2 Function Introduction

Displaying Effect

Low latency	Reduce the delay of the video source on the receiving card. Latency as low as 1 frame (for light boards with driver ICs using built-in RAM)
RGB Independent Gamma Adjustment	With independent master and software that supports RGB independent gamma adjustment, By adjusting the "red Gamma", "green Gamma" and "blue Gamma" respectively, Effectively deal with the problems of the display screen, such as uneven low gray, white balance drift, etc. Make the display more realistic.
Multiple Solutions of the Displayed Effects are Supported	Using it with Monncell AutoLED Software, the Refresh and Grey Scale performances are able to take the precedence over other settings.
The Images on the led screen can be rotated 90 degree in a factor of multiple times	Using it with Mooncell AutoLED Software.

Enhanced Operability:

Data Port User-Defined is supported	Using it with the Mooncell AutoLED Software, you can detect and edit the output data of the receiving cards.
To build up a complicated cabinet is supported	On AutoLED Software, there is an ‘Advanced Setting’, from here you can quickly arrange or structure the modules at your option.
To structure a complicated Led Screen is supported	On AutoLED Software, there is a “Complicated Led Screen Connection”, from here you can quickly arrange or structure the cabinet modules on your option.

Hardware Stability

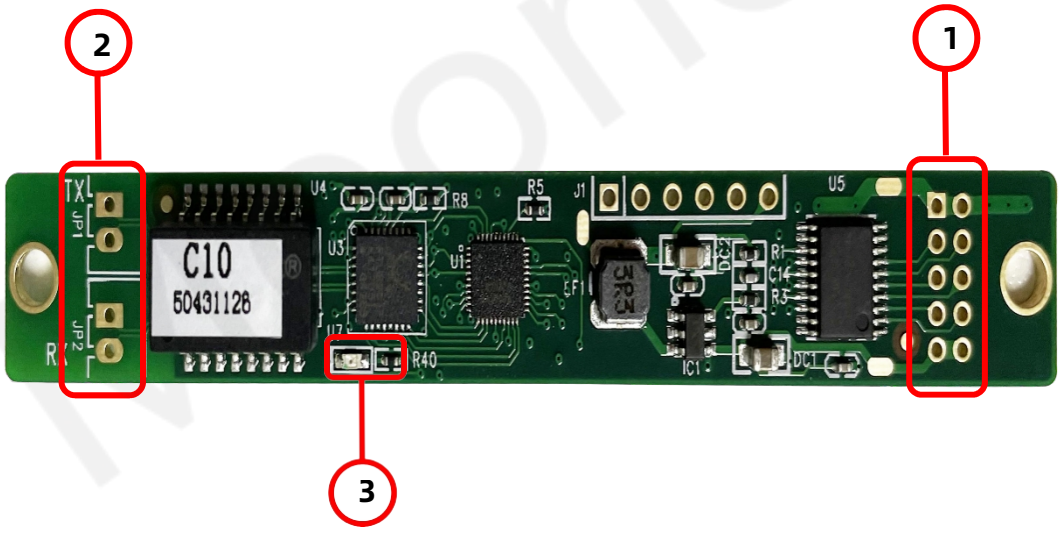
Hot Backup (Online Backup)	Network Port Backup: The 2 Network Ports on the HUB enhanced the reliability of its series connection by having the main network cable Loop Backup. Whenever a network cable fails, the other one will take the job to keep the led screen running properly.

3 Product Parameters

Basic Parameters

Serial Connection Data（RGB）/Parallel	maximum Loading capacity （pixels）	Loading Capacity After lightness Calibrating	Loading Capacity after Color Calibrating
1 Group	512 Pixels	-	-

Single Network Pot Cascading Quantity	Scanning Lines Supported		
≤256PCS	1-4 Scan		



Hardware Introduction

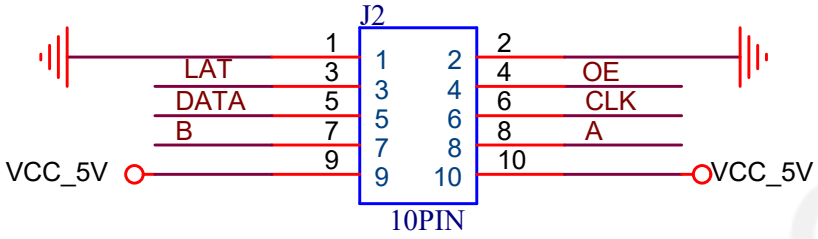
Ports Illustrations

#	Position	Illustrations
1	J2	Signal interface for output to display with power supply 5V
2	JP1	100 Gigabit signal input TX connector, input signal connector from splitter SH100

	JP2	100 Gigabit signal output RX connector, cascade output to next receiving card
3	D1	Status Indicator

Output Ports Definition

Definition of the Port



JP2 Definition Illustration

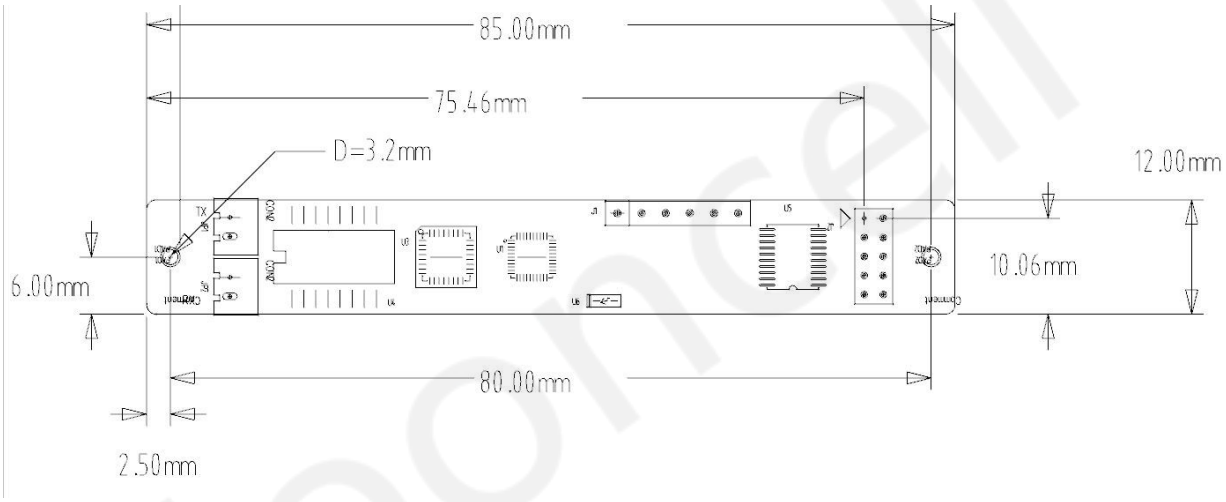
Illustration	Definition	PIN	PIN	Definition	Illustration
Grounding	GND	1	2	GND	Grounding
Serial Connection Data	LE	3	4	OE	Serial Connection Clock
Line Decoding Signal	DATA	5	6	CLK	Line Decoding Signal
7.5V	B	7	8	A	7.55V

Indicator Illustration

Indicator	Position	Status	Illustration
Status Indicator (Green)	D1	Flickering Slowly at a constant	The receiving card is working properly, The Ethernet Cable Connection is fine, No DVI Signal Input
		Flickering Fast at a constant speed	The receiving card is working properly, The Ethernet Cable Connection is fine, with DVI Signal Input

		It goes out	No Gigabit Ethernet Signal
		2 flashes at an interval of 4S	The receiving card enters the boot state
Power Indicator	D2	Long Lasting On	The receiving card is normally powered

Dimensions



4 Product Specifications

Specifications

Electric Parameters	Input Voltage	DC3.5-5.5V
	Rated Current	0.6A
	Rated Power	3W
Operating Environment	Operating Temperature	-20℃ - 70℃
	Operating Humidity	10%RH-90%RH
Storage Environment	Temperature	-25℃～125℃
Dimensions	85mm X 12mm	
Net Weight	4.8g	
Certifications	It conforms to RoHS and CE-EMC standards.	

Precautions

1. **The testing (debugging) and installation should be done by the qualified professionals**
2. **Anti-Static, Water-Proof and Dust-Proof Required**