



6432 Dot Matrix Bicolor LED Information Board User's Guide

Table of contents

Chapter1. Brief Introduction	1
1-1. Overview	1
1-2. Gallery	1
Chapter2. Hardware Description	2
2-1. Schematic.....	2
2-2. Main Feature	3
Chapter3. Application Notes	4
3-1. Port definition	4
3-2. Timing Diagrams	5
Chapter4. Contact Us.....	6

Table of contents

NOTES:

Chapter1. Brief Introduction

1-1. Overview

6432 Dot Matrix Bicolor LED Display Information Board is an economical solution for advertising or information purposes for displaying information, symbols and cartoons at different changing effects, and is suitable for applications in shops, restaurants, exhibition saloons, airports and railway stations etc. This 6432 dot matrix bicolor LED display information board holds high distinguish rate, soft color, and double color for choice (green and red color).

1-2. Gallery

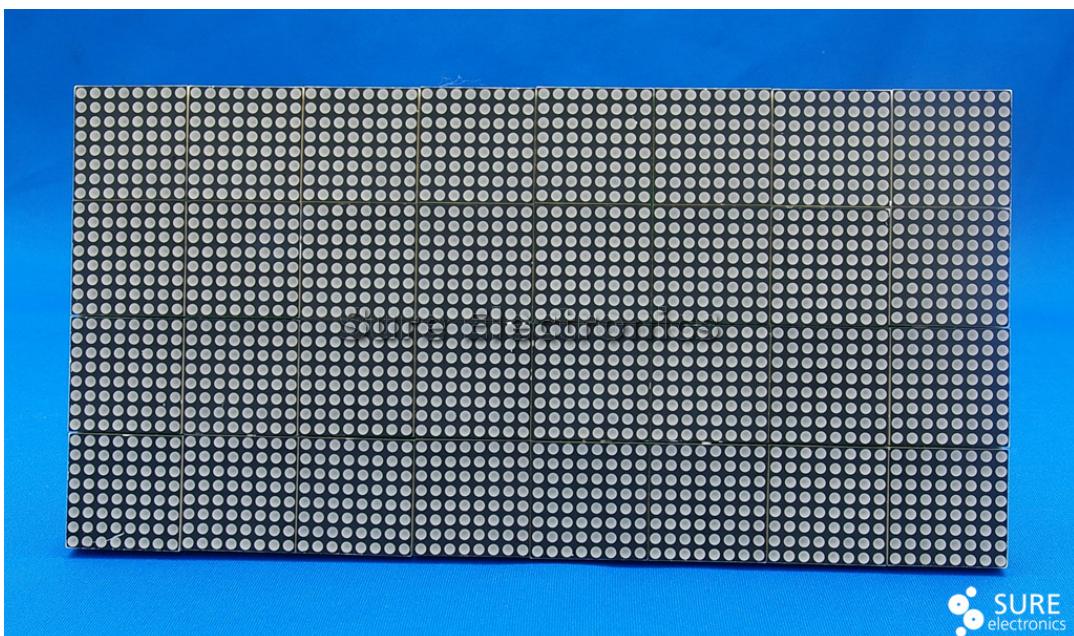


Figure 1

Chapter2. Hardware Description

2-1. Schematic

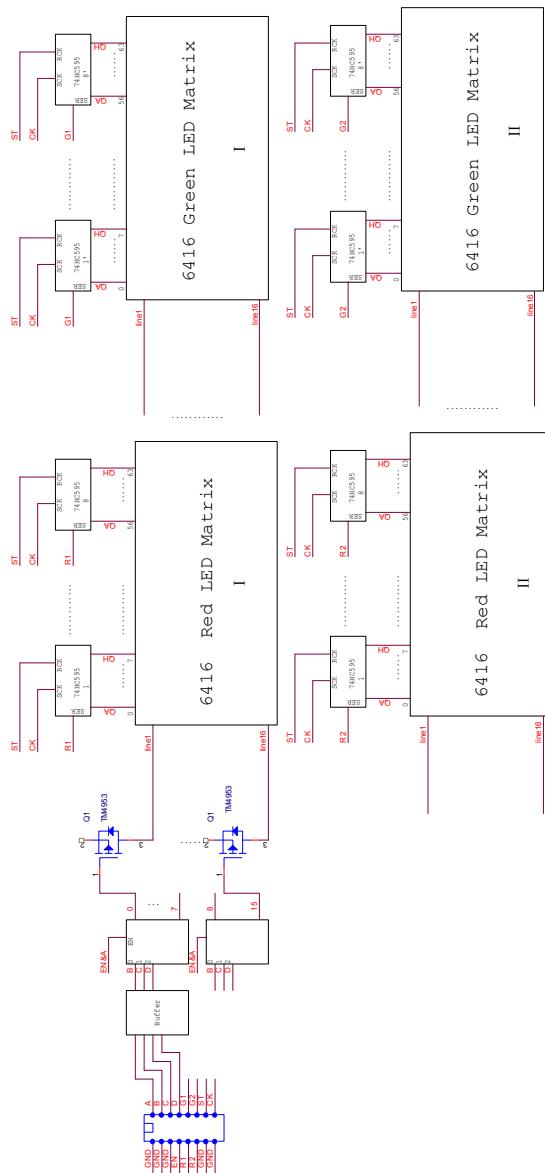


Figure 2 Block Diagram

2-2. Main Feature

- Programmable.
- Size: about 5inch×20inch display area.
- Operating voltage and current: 5V, 700mA (Max.), 400mA(Avg.)
- 6432 dot matrix on each board..
- Soft, comfortable and optional color: Green and Red
- Each board contains 32 pieces of 0808 LED dot matrix information boards.
- Serial MCU interface---R1/R2/G1/G2, CK.
- It can be connected to next board to form a 6432 dot matrix information board.

Chapter3. Application Notes

3-1. Port definition



Port	Function Description
GND	Ground Reference
EN	Enable 74HC138 encoder
R1	Data input for 74HC595 shift registers. Data of 16 rows on upper side of 6432 dot matrix information board are provided by 8 pieces of 74HC595 shift register. LED emitting color is red.
R2	Provide data input for 16 rows on underside of 6432 dot matrix board. LED emitting color is red
A, B, C, D	These signals are transferred through buffers to strengthen themselves, and then sent to two pieces of 74HC138 encoder to enable one of 16 rows of 6432 dot matrix information board.
G1, G2	Their functions are the same as those of R1 and R2. Except that their corresponding LED emitting color is green. They provide data to rows of 6432 dot matrix board via other 16 pieces of 74HC595 shift registers.
ST	Enable 74HC595 shift register to output data.
CK	Clock input for 74HC595 shift register.

3-2. Timing Diagrams

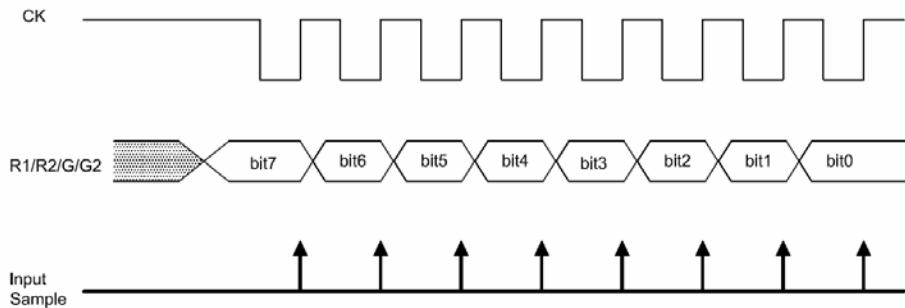


Figure 3

Panel displaying frequency is 70frame/s and screen refreshing should be completed in every frame.

The scan time of one row is not less than $1 / (80 * 16s)$

Input data sampled at the end of data output time and on the transition from low to high clock level.

Chapter4. Contact Us

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