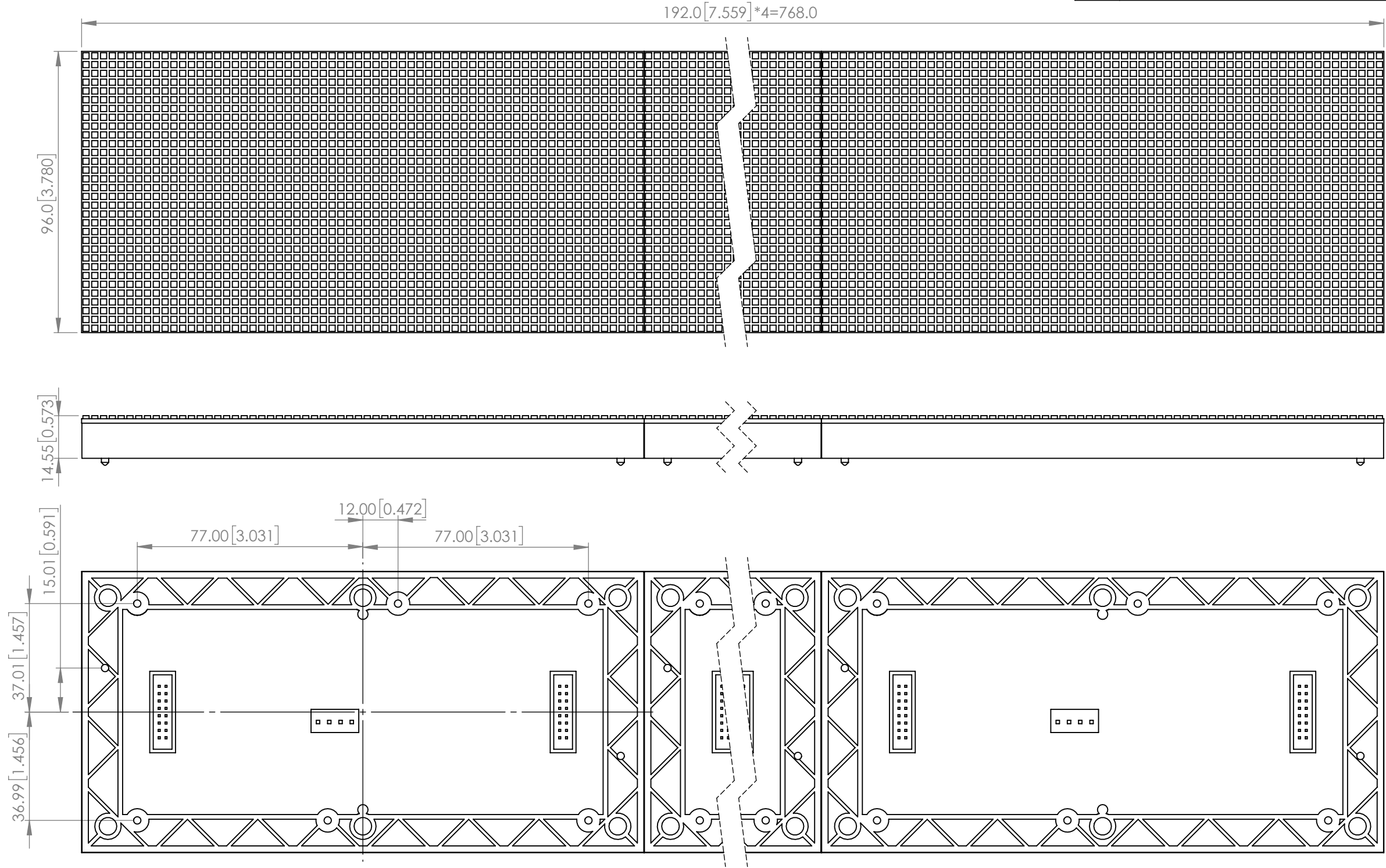
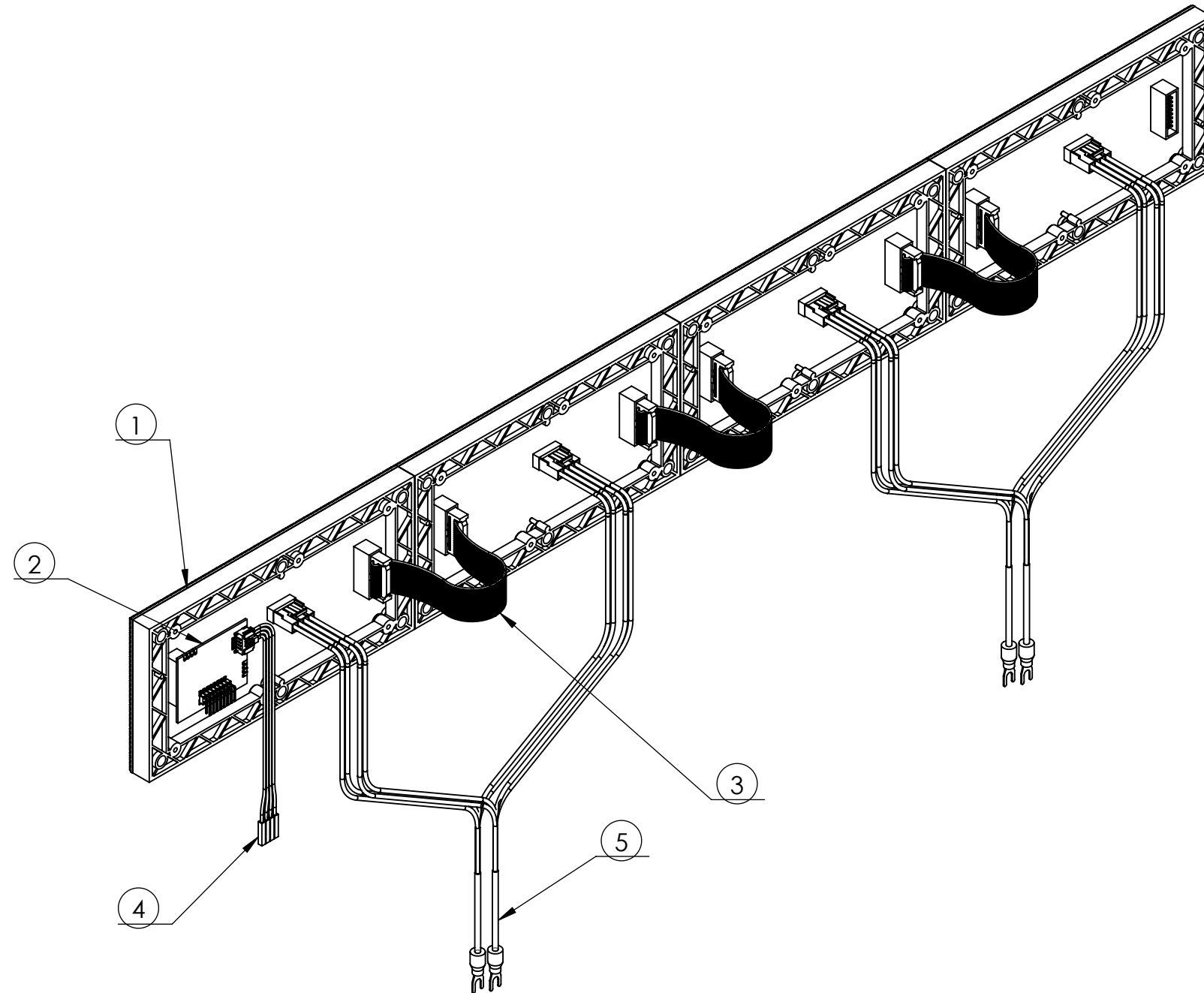


|             |                                     |                 |     |          |
|-------------|-------------------------------------|-----------------|-----|----------|
| PART NUMBER |                                     | LDM-25632-P3-UR | REV | A        |
| REV         | E.C.N. NUMBER AND REVISION COMMENTS |                 |     | DATE     |
| A           | ECN-Lumex202300037                  |                 |     | 03.06.23 |



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= <sup>+DECIMAL PRECISION</sup><sub>-0.00</sub> MAX.= <sup>+0.00</sup><sub>-DECIMAL PRECISION</sub>

|                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                              |  |                   |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|---------------------------------------------------------------------------------------|
| <br>425 N. GARY AVE.<br>CAROL STREAM, IL 60188<br>PHONE : 800-278-5666<br>FAX : 630-315-2150<br>WEB : WWW.LUMEX.COM | ezDisplay P3 OUTDOOR DOT MATRIX, 256*32 PIXEL, RGB LEDs, UART INTERFACE, VF DC 5V                                                                                                                                                                                                                                            |  | DATE : 2022.10.06 | DRAWN BY : E.C.                                                                       |
|                                                                                                                                                                                                        | **THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE.**                                                                                                                                                                                                                                                                |  | PAGE : 1 OF 6     | CHKD BY : T.S.                                                                        |
|                                                                                                                                                                                                        | CONFIDENTIAL INFORMATION                                                                                                                                                                                                                                                                                                     |  | SCALE : NTF       | APRVD BY : G.Y.                                                                       |
|                                                                                                                                                                                                        | THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES. |  | UNIT : mm [INCH]  |  |



## COMPONENT

| ITEM | P/N                  | QTY. |
|------|----------------------|------|
| 1    | LDM-6432-P3-PCB      | 4    |
| 2    | LDM-12832-1LT-RGB-NU | 1    |
| 3    | FLAT CABLE           | 3    |
| 4    | WIRE002              | 1    |
| 5    | WIRE008              | 2    |

## WIRELEAD DEFINITION

| P/N     | PIN NO. | COLOR  | DEFINITION |
|---------|---------|--------|------------|
| WIRE002 | 1       | YELLOW | TX1        |
|         | 2       | WHITE  | RX1        |
|         | 3       | RED    | 5V         |
|         | 4       | BLACK  | GND        |
| WIRE008 | 1       | RED    | 5V         |
|         | 2       | RED    | 5V         |
|         | 3       | BLACK  | GND        |
|         | 4       | BLACK  | GND        |

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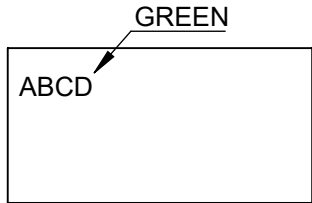
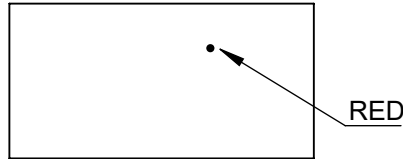
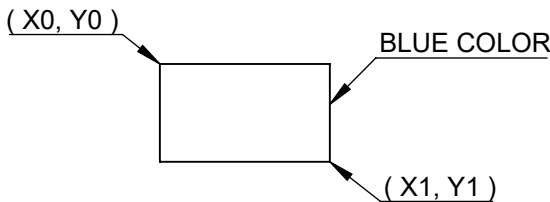
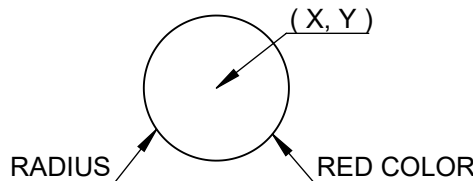
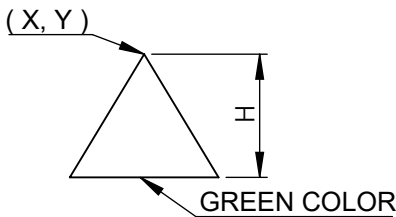
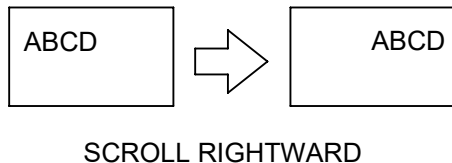
GENERAL SPECIFICATION

| ITEM                 | DESCRIPTION      | UNIT   |
|----------------------|------------------|--------|
| MODULE SIZE          | 768(L) × 96(W)   | mm     |
| PIXEL PITCH          | 3                | mm     |
| PIXEL FORM           | RGB              | --     |
| PIXEL DENSITY        | 100000           | dot/m2 |
| MODULE RESOLUTION    | 256x32           | dot    |
| DRIVE METHOD         | 1/16 SCAN        | --     |
| CONTROLLER INTERFACE | UART             | --     |
| POWER CONSUMPTION    | 60 MAX           | W      |
| BRIGHTNESS           | 450 MIN          | cd/m2  |
| TEMPERATURE RANGE    | -20~60, 10~80%RH | °C     |
| FRAME COLOR          | BLACK            | °C     |

UART CONFIGURATION

| ITEM         | SETING VALUE |
|--------------|--------------|
| BAUD RATE    | 115200       |
| DATA BIT     | 8            |
| STOP BIT     | 1            |
| PARITY BIT   | NONE         |
| FLOW CONTROL | NONE         |

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| DIAGRAM                                                                             | COMMAND*                           | EXAMPLE                                                                                                                            |
|-------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|    | Write a 5x7 RGB String             | <b>ate1</b> =(line,column, <b>Color 0~255*</b> ,String)<br><b>ate1</b> =(0,0,4,ABCD)                                               |
|    | Set a Color Pixel                  | <b>atee</b> =(X position,Y position, <b>Color 0~255*</b> )<br><b>atee</b> =(48,6,96) : '96' Red color                              |
|   | Draw a Rectangle                   | <b>at91</b> =(X0 position,Y0 position,X1 position,Y1 position, <b>Color 0~255*</b> )<br><b>at91</b> =(0,0,55,7,2) : '2' blue color |
|   | Draw a Circle                      | <b>at94</b> =(X position,Y position,Radius, <b>Color 0~255*</b> )<br><b>at94</b> =(48,4,3,64) : '64' red color                     |
|  | Draw a tip upward Triangle         | <b>at96</b> =(X position,Y position,Height, <b>Color 0~255*</b> )<br><b>at96</b> =(48,1,3,4) : '4' green color                     |
|  | Scroll the whole display rightward | <b>atd5</b> =(shif time in ms)<br><b>atd5</b> =(20)                                                                                |

\* Please refer to detail commands/ **COLOR CODE Table** on Lumex website: [www.lumex.com/ezdisplay](http://www.lumex.com/ezdisplay)

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ezDisplay P3 OUTDOOR DOT MATRIX, 256\*32 PIXEL, RGB LEDs, UART INTERFACE, VF DC 5V

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|                   |
|-------------------|
| DATE : 2022.10.06 |
|-------------------|

DRAWN BY : E.C.

PAGE : 4 OF 6

|                |
|----------------|
| CHKD BY : T.S. |
|----------------|

SCALE : NTF

APRVD BY : G.Y.

UNIT : mm [INCH]



COLOR CODE TABLE

|    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |
|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0  | 1  | 2  | 3  | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
| 32 | 33 | 34 | 35 | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  |
| 64 | 65 | 66 | 67 | 68  | 69  | 70  | 71  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  |
| 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 |

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ASCII CODE OF 5X7 FONTS AND 8X16 FONTS

| Hex  | Symbol | Hex  | Symbol | Hex  | Symbol |
|------|--------|------|--------|------|--------|
| 0x20 |        | 0x40 | @      | 0x60 | `      |
| 0x21 | !      | 0x41 | A      | 0x61 | a      |
| 0x22 | "      | 0x42 | B      | 0x62 | b      |
| 0x23 | #      | 0x43 | C      | 0x63 | c      |
| 0x24 | \$     | 0x44 | D      | 0x64 | d      |
| 0x25 | %      | 0x45 | E      | 0x65 | e      |
| 0x26 | &      | 0x46 | F      | 0x66 | f      |
| 0x27 |        | 0x47 | G      | 0x67 | g      |
| 0x28 | (      | 0x48 | H      | 0x68 | h      |
| 0x29 | )      | 0x49 | I      | 0x69 | i      |
| 0x2a | *      | 0x4a | J      | 0x6a | j      |
| 0x2b | +      | 0x4b | K      | 0x6b | k      |
| 0x2c | ,      | 0x4c | L      | 0x6c | l      |
| 0x2d | -      | 0x4d | M      | 0x6d | m      |
| 0x2e | .      | 0x4e | N      | 0x6e | n      |
| 0x2f |        | 0x4f | O      | 0x6f | o      |
| 0x30 | 0      | 0x50 | P      | 0x70 | p      |
| 0x31 | 1      | 0x51 | Q      | 0x71 | q      |
| 0x32 | 2      | 0x52 | R      | 0x72 | r      |
| 0x33 | 3      | 0x53 | S      | 0x73 | s      |
| 0x34 | 4      | 0x54 | T      | 0x74 | t      |
| 0x35 | 5      | 0x55 | U      | 0x75 | u      |
| 0x36 | 6      | 0x56 | V      | 0x76 | v      |
| 0x37 | 7      | 0x57 | W      | 0x77 | w      |
| 0x38 | 8      | 0x58 | X      | 0x78 | x      |
| 0x39 | 9      | 0x59 | Y      | 0x79 | y      |
| 0x3a | :      | 0x5a | Z      | 0x7a | z      |
| 0x3b | ;      | 0x5b | ]      | 0x7a | {      |
| 0x3c | <      | 0x5c | \      | 0x7a |        |
| 0x3d | =      | 0x5d | [      | 0x7a | }      |
| 0x3e | >      | 0x5e | ^      | 0x7a | ~      |
| 0x3f | ?      | 0x5f | _      | 0x7a | <-     |

ASCII CODE OF 16X16 FONTS

| Hex  | Symbol |
|------|--------|
| 0x30 | 0      |
| 0x31 | 1      |
| 0x32 | 2      |
| 0x33 | 3      |
| 0x34 | 4      |
| 0x35 | 5      |
| 0x36 | 6      |
| 0x37 | 7      |
| 0x38 | 8      |
| 0x39 | 9      |

NO. OF 8X16 PATTERN

| No. | Symbol |
|-----|--------|
| 0   | 0      |
| 1   | 1      |
| 2   | 2      |
| 3   | 3      |
| 4   | 4      |
| 5   | 5      |
| 6   | 6      |
| 7   | 7      |
| 8   | 8      |
| 9   | 9      |

NO. OF 32X32 PATTERN

| No. | Symbol |
|-----|--------|
| 0   | 0      |
| 1   | 1      |
| 2   | 2      |
| 3   | 3      |
| 4   | 4      |
| 5   | 5      |
| 6   | 6      |
| 7   | 7      |
| 8   | 8      |
| 9   | 9      |
| 10  | °C     |
| 11  | °F     |
| 12  | ☼      |

NO. OF 8X8 PATTERN

| No. | Symbol |
|-----|--------|
| 0   | 0      |
| 1   | 1      |
| 2   | 2      |
| 3   | 3      |
| 4   | 4      |
| 5   | 5      |
| 6   | 6      |
| 7   | 7      |
| 8   | 8      |
| 9   | 9      |

NO. OF 16X16 PATTERN

| No. | Symbol |
|-----|--------|
| 0   | 0      |
| 1   | 1      |
| 2   | 2      |
| 3   | 3      |
| 4   | 4      |
| 5   | 5      |
| 6   | 6      |
| 7   | 7      |
| 8   | 8      |
| 9   | 9      |

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