G-NOR ELECTRONICS CO.,LTD.

TYPE:GNLM-S20(2R1G1B)-A

Electro-Optical Characteristics:

Absolute Maximum Ratings

	SYMBOL	RATINGS
Peak For ward current per Dice (Duty cycle 1/10.10KHZ)	Ipf	100mA
Continuous Forward current per Dice	If	25mA
Operating Temperature	Topr	-25℃to+85℃
Storage temperature	Tstg	-25℃to+85℃
Soldering Temperature: 1/16 Inch below seating place for 5 seconds		260℃

--RED

Parameter	Symbol	**Condition**	Typ.	Max.	Unit
Forward Voltage	**VF**	IF=20mA	2.0	---	V
Reverse Current	IR	VR=10V	---	50	uA
Luminous Intensity	IV	IF=20mA	450	---	mcd
Peak Emission Wavelength	λP	IF=20mA	625	---	nm
View Angle(2θ1/2)	deg	IF=20mA	100°/40°	---	deg

--GREEN

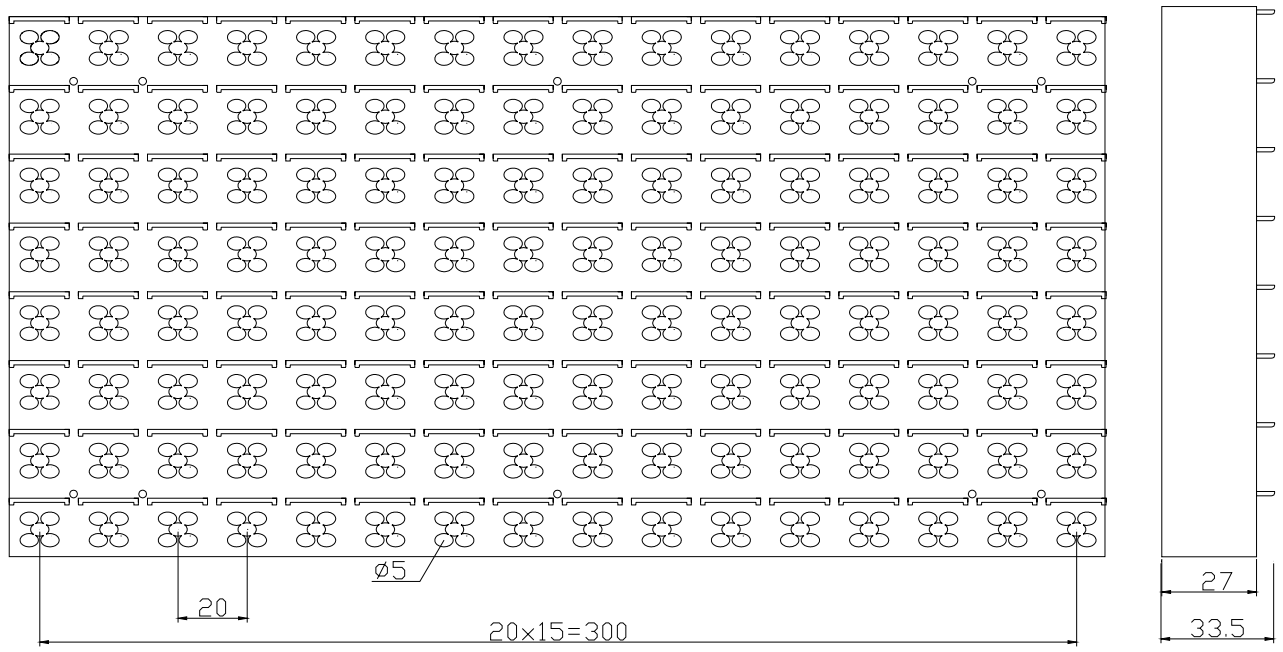
Parameter	Symbol	**Condition**	Typ.	Max.	Unit
Forward Voltage	**VF**	IF=20mA	3.5	---	V
Reverse Current	IR	VR=5V	---	50	uA
Luminous Intensity	IV	IF=20mA	1200	---	mcd
Peak Emission Wavelength	λP	IF=20mA	518	---	nm
View Angle(2θ1/2)	deg	IF=20mA	100°/40°	---	deg

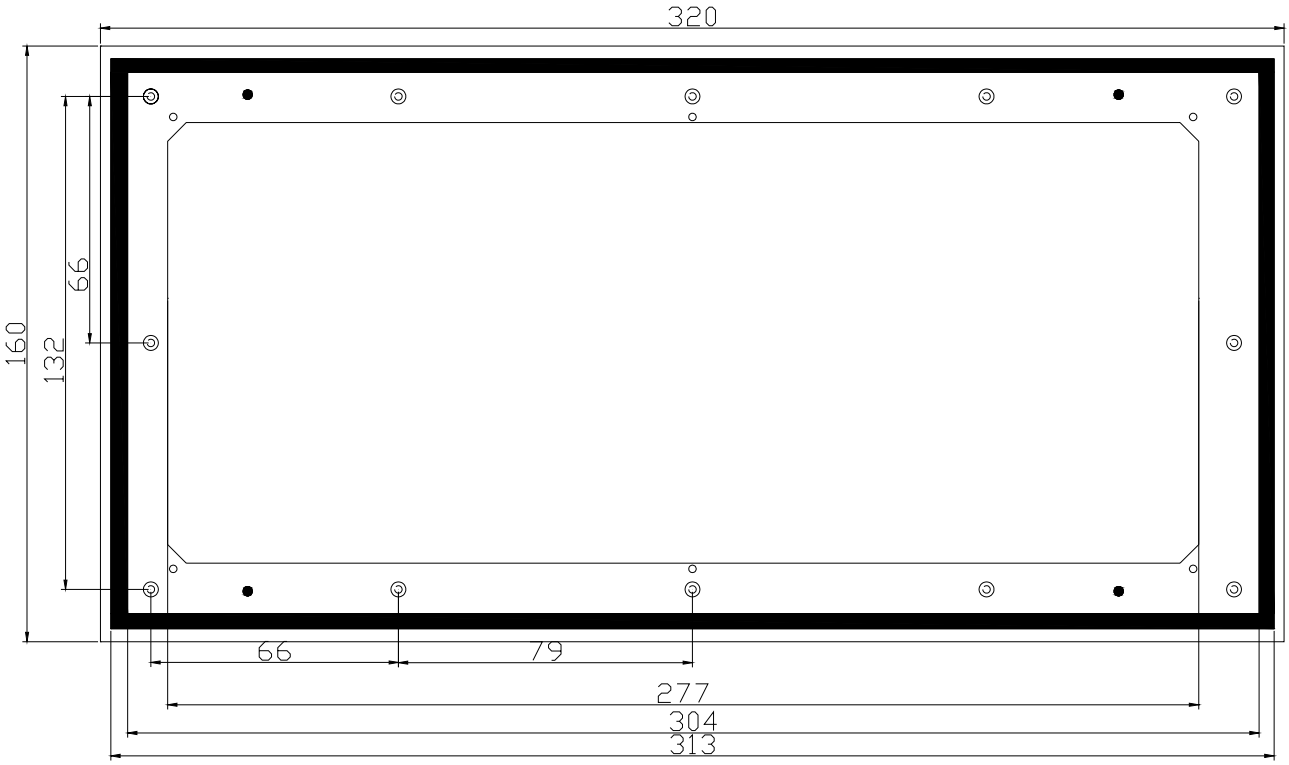
--BLUE

Parameter	Symbol	**Condition**	Typ.	Max.	Unit
Forward Voltage	**VF**	IF=20mA	3.5	---	V
Reverse Current	IR	VR=5V	---	50	uA
Luminous Intensity	IV	IF=20mA	250	---	mcd
Peak Emission Wavelength	λP	IF=20mA	465	---	nm
View Angle(2θ1/2)	deg	IF=20mA	100°/40°	---	deg

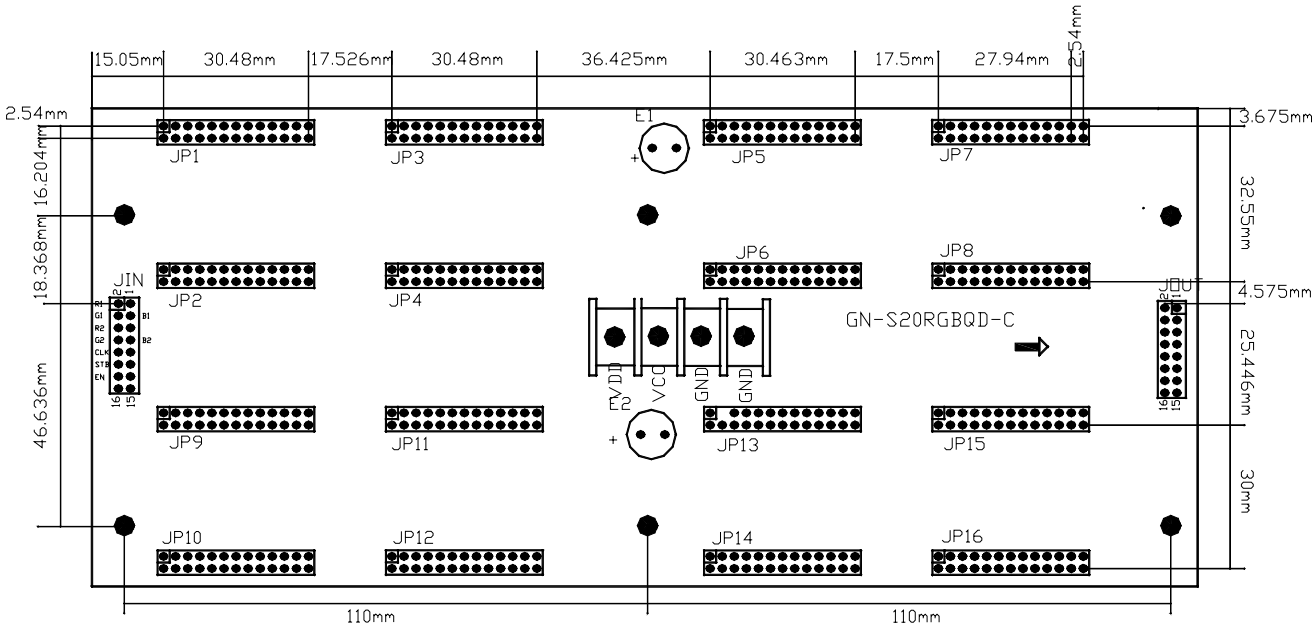
PACKAGE DIMENSION

(Unit:mm Tolerance:±0.2mm)

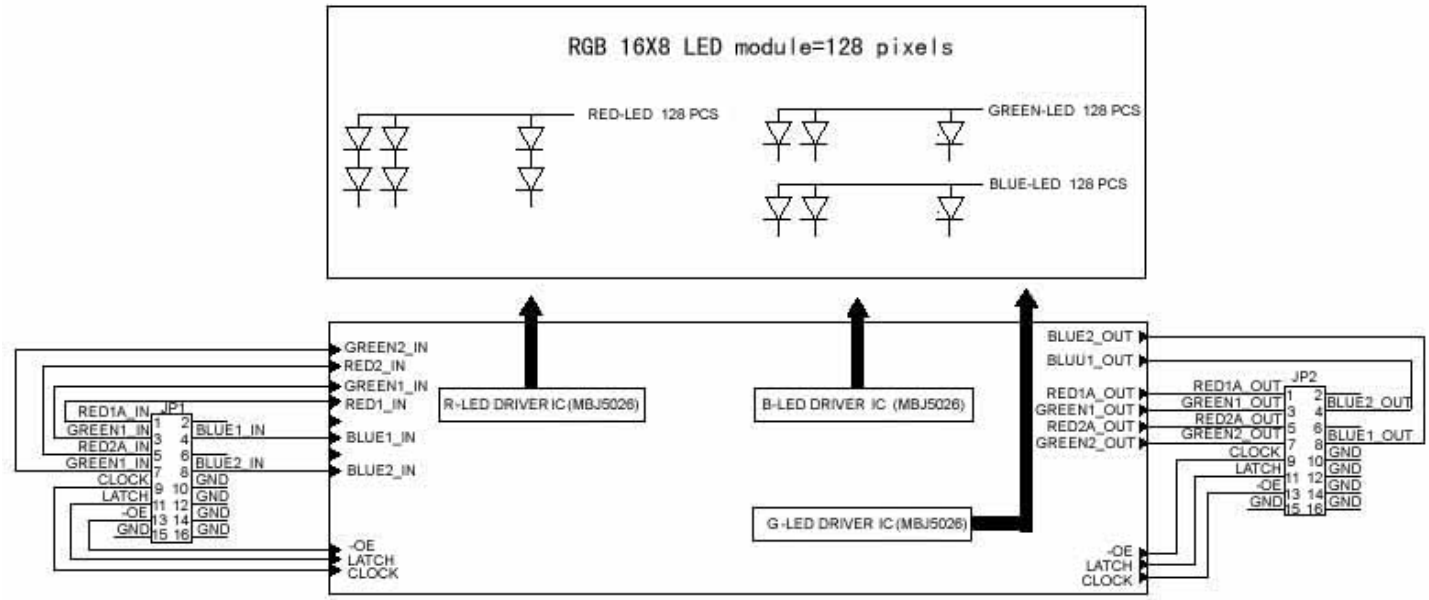




Terminal location of Module



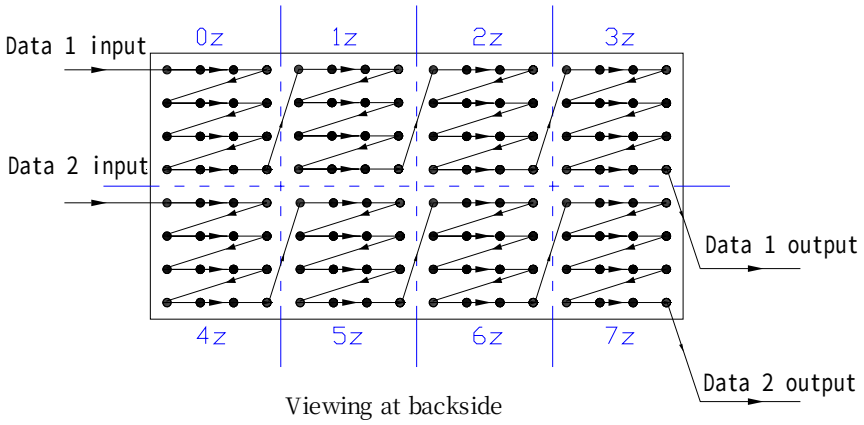
LED Module's Drive



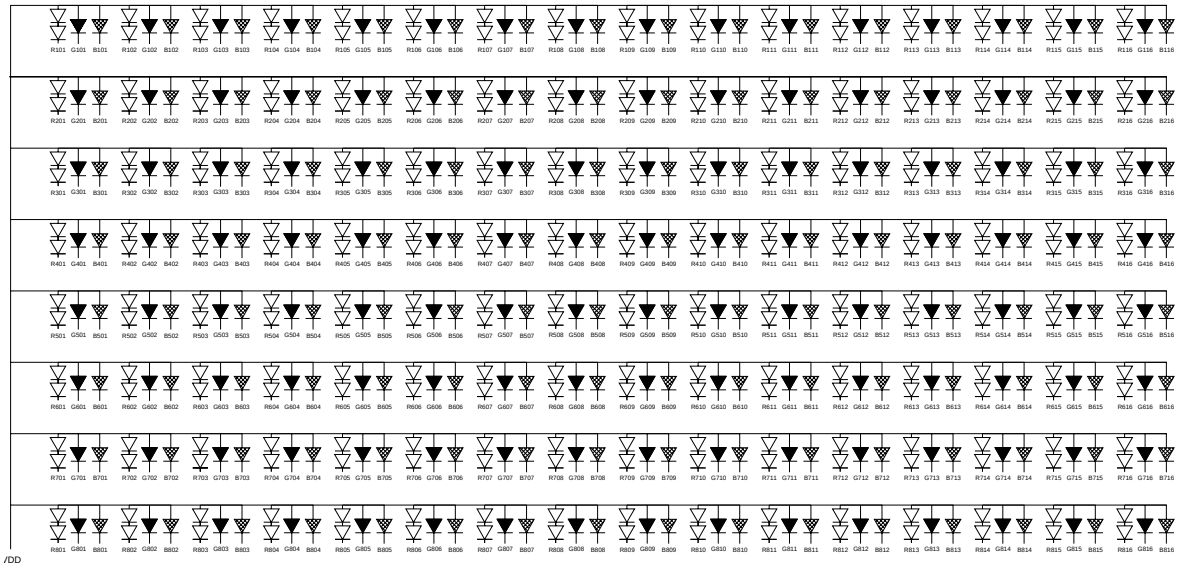
There are 8 rows x 16 columns total 128 pixels in each RGB LED module.
2R1G1B 4 LEDs in each pixel.
There are 8 zones in each module 4 columns and 2 rows，
There are 16 pixels in the each zone 4 columns and 4 rows。

0 **zone**	1 **zone**	2 **zone**	3 **zone**
4 **zone**	5 **zone**	6 **zone**	7 **zone**

LEDS be driver by IC MBI5026，the data input drawing as following：

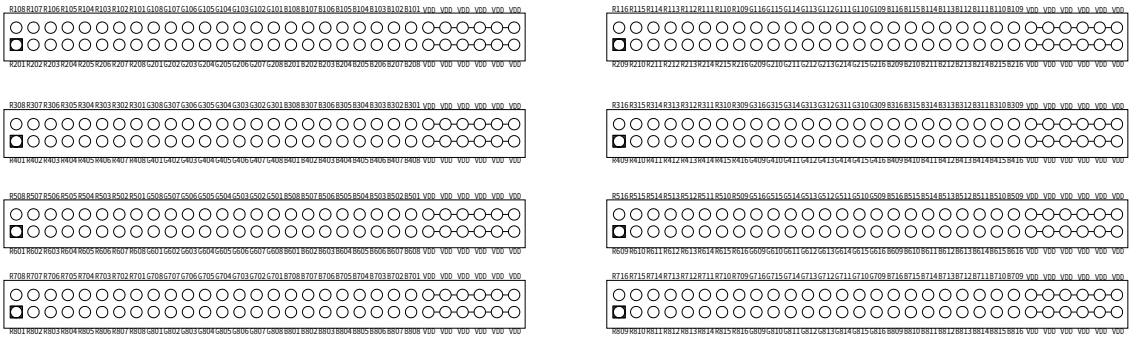
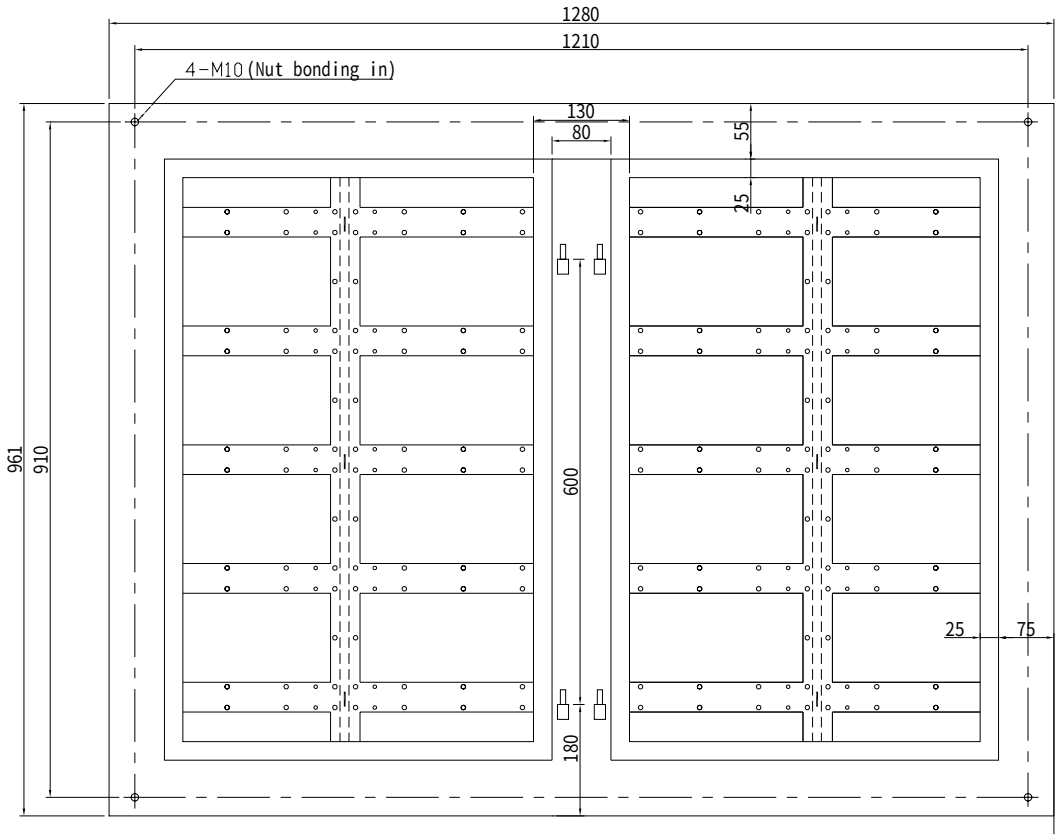
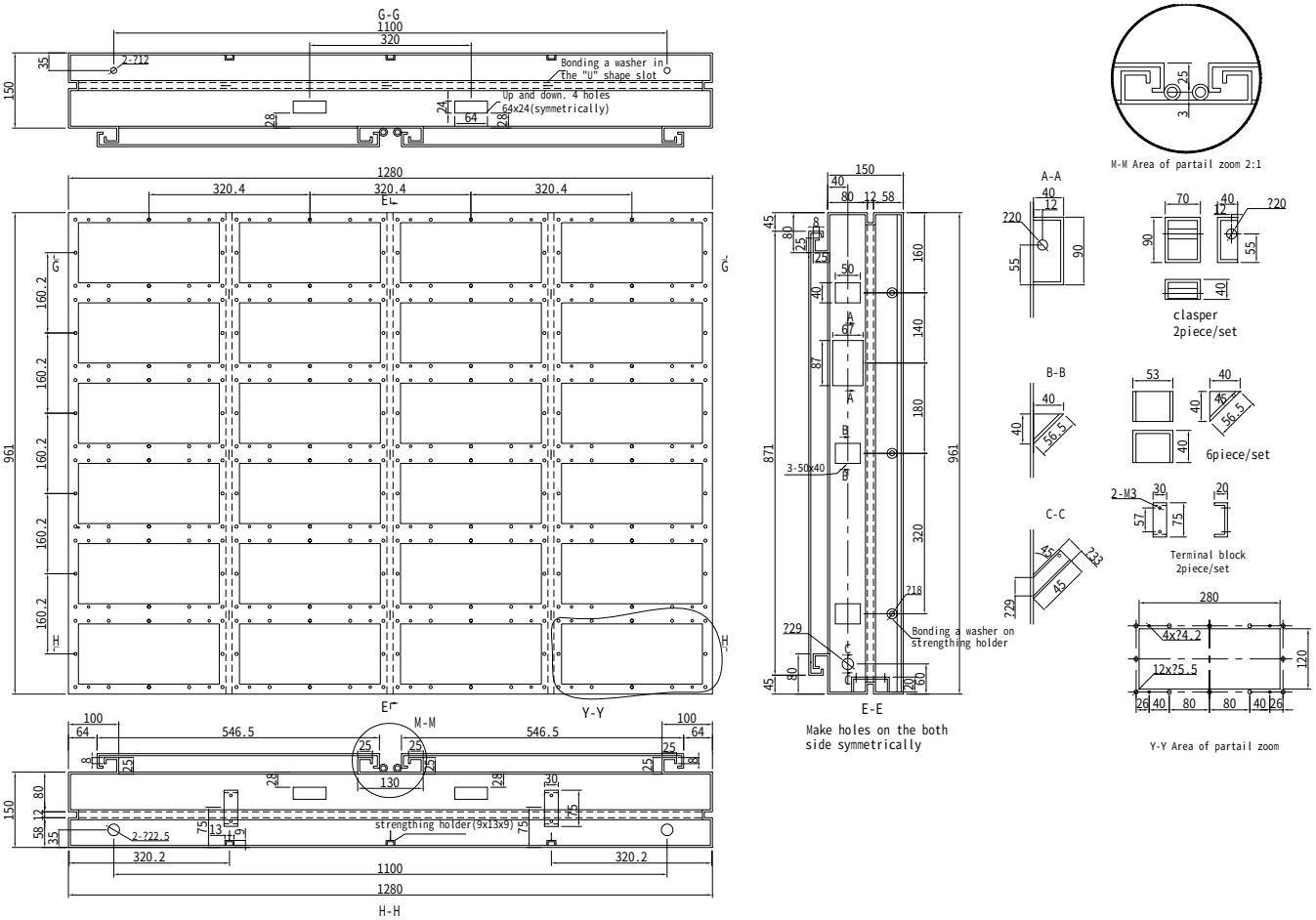


INTERNAL CIRCUIT DIAGRAM



RED
GREEN
BLUE

View from LED emitting face



DIMENSIONS OF METAL CASE