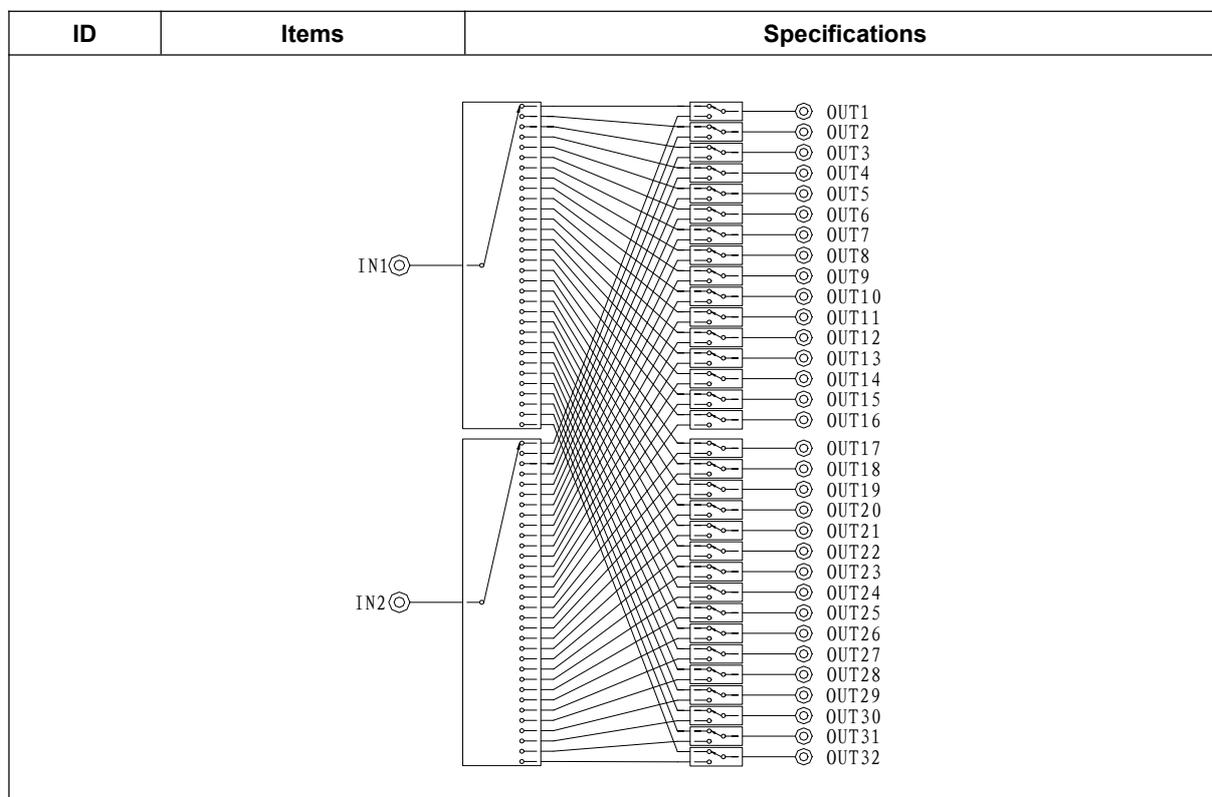


# HX232KGGF4081G Switch Matrix Module

## 1. Functional Diagram



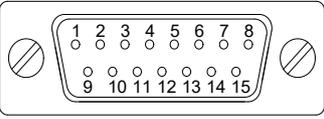
## 2. Description

ID	Items	Specifications
2-1	Type	Absorptive 2*32 Switch Matrix Module
2-2	Frequency Range	0.4GHz ~ 8GHz
2-3	Isolation	≥80dB
2-4	Insertion Loss	≤9.5dB
2-5	VSWR	≤1.8
2-6	Impedance	50Ω
2-7	RF Input Power	2W
2-8	Switching Speed	≤200ns
2-9	Input/Output Connectors	SMA-F
2-10	Control Connectors	DB15-male
2-11	Control	TTL=0V/3.3V ~ 5V
2-12	DC Power Supply	+5V/2.6A, -5V/0.6A

## 3. Environmental Specifications

ID	Items	Specifications
3-1	Operational Temperature	-40°C ~ +70°C
3-2	Storage Temperature	-55°C ~ +85°C

#### 4. Interface

ID	Items	Specifications
4-1	Control Connectors	DB15-male
		
4-2	NO	Specifications
	1,2	+5V
	3	-5V
	4,5	GND
	6	T1
	7	T2
	8	T3
	9	T4
	10	T5
	11	T6
	12	T7
	13	T8
	14	T9
	15	T10

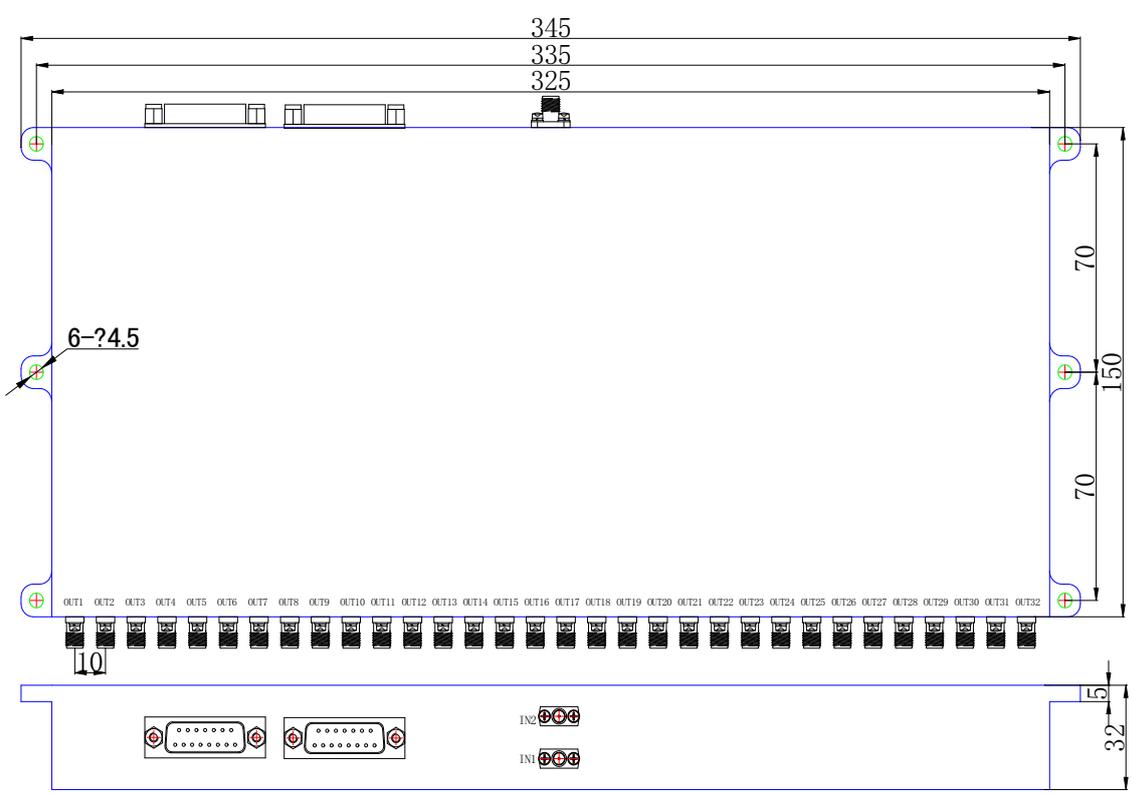
#### 5. Truth Table

ID	T5	T4	T3	T2	T1	Signal Path State
5-1	0	0	0	0	0	IN1-OUT1
	0	0	0	0	1	IN1-OUT2
	0	0	0	1	0	IN1-OUT3
	0	0	0	1	1	IN1-OUT4
	0	0	1	0	0	IN1-OUT5
	0	0	1	0	1	IN1-OUT6
	0	0	1	1	0	IN1-OUT7
	0	0	1	1	1	IN1-OUT8
	0	1	0	0	0	IN1-OUT9
	0	1	0	0	1	IN1-OUT10
	0	1	0	1	0	IN1-OUT11
	0	1	0	1	1	IN1-OUT12
	0	1	1	0	0	IN1-OUT13
	0	1	1	0	1	IN1-OUT14
	0	1	1	1	0	IN1-OUT15
	0	1	1	1	1	IN1-OUT16
	1	0	0	0	0	IN1-OUT17

	1	0	0	0	1	IN1-OUT18
	1	0	0	1	0	IN1-OUT19
	1	0	0	1	1	IN1-OUT20
	1	0	1	0	0	IN1-OUT21
	1	0	1	0	1	IN1-OUT22
	1	0	1	1	0	IN1-OUT23
	1	0	1	1	1	IN1-OUT24
	1	1	0	0	0	IN1-OUT25
	1	1	0	0	1	IN1-OUT26
	1	1	0	1	0	IN1-OUT27
	1	1	0	1	1	IN1-OUT28
	1	1	1	0	0	IN1-OUT29
	1	1	1	0	1	IN1-OUT30
	1	1	1	1	0	IN1-OUT31
	1	1	1	1	1	IN1-OUT32
<b>ID</b>	<b>T10</b>	<b>T9</b>	<b>T8</b>	<b>T7</b>	<b>T6</b>	<b>Signal Path State</b>
5-2	0	0	0	0	0	IN2-OUT1
	0	0	0	0	1	IN2-OUT2
	0	0	0	1	0	IN2-OUT3
	0	0	0	1	1	IN2-OUT4
	0	0	1	0	0	IN2-OUT5
	0	0	1	0	1	IN2-OUT6
	0	0	1	1	0	IN2-OUT7
	0	0	1	1	1	IN2-OUT8
	0	1	0	0	0	IN2-OUT9
	0	1	0	0	1	IN2-OUT10
	0	1	0	1	0	IN2-OUT11
	0	1	0	1	1	IN2-OUT12
	0	1	1	0	0	IN2-OUT13
	0	1	1	0	1	IN2-OUT14
	0	1	1	1	0	IN2-OUT15
	0	1	1	1	1	IN2-OUT16
	1	0	0	0	0	IN2-OUT17
	1	0	0	0	1	IN2-OUT18
	1	0	0	1	0	IN2-OUT19
	1	0	0	1	1	IN2-OUT20
	1	0	1	0	0	IN2-OUT21
	1	0	1	0	1	IN2-OUT22
	1	0	1	1	0	IN2-OUT23
	1	0	1	1	1	IN2-OUT24
	1	1	0	0	0	IN2-OUT25
	1	1	0	0	1	IN2-OUT26

	1	1	0	1	0	IN2-OUT27
	1	1	0	1	1	IN2-OUT28
	1	1	1	0	0	IN2-OUT29
	1	1	1	0	1	IN2-OUT30
	1	1	1	1	0	IN2-OUT31
	1	1	1	1	1	IN2-OUT32

## 6. Outline Drawing

ID	Items	Specifications
6-1	Outline Drawing	Unit: mm
Tolerances: ±0.1mm		
 <p>The drawing shows a rectangular enclosure with a total width of 345 mm and a total height of 150 mm. The top edge has a width of 335 mm, and the bottom edge has a width of 325 mm. The height is divided into three sections: 70 mm at the top, 150 mm in the middle, and 70 mm at the bottom. There are 32 output ports (OUT1-OUT32) along the bottom edge, each with a 10 mm spacing. Two input ports (IN1 and IN2) are located on the right side, each with a 32 mm spacing. The enclosure has a thickness of 5 mm. There are also two 6-pin ports on the left side, each with a 24.5 mm spacing.</p>		
6-2	Material	Aluminum
6-3	Finished	Nickel Plated
6-4	Weight	/

NOTE: ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.