



高霖通訊科技有限公司  
Go-Link Technology Co., Ltd.

產品規格/承認書  
PRODUCT SPECIFICATION / APPROVAL SHEET

產 品

Product : HDMI Extender Module

型 號

Model No. : MHNTX3001 , MHNRX3001

客 戶

Customer :

客戶型號

Customer Model No. :

		本承認書內容若貴公司確認無誤， 請於下方承認欄內簽章。 <b>Please confirm your acceptance of this approval sheet by authorized signatures.</b>	
		承認欄 <b>Approved Signature</b>	
版本 (Version)	V1.2		
日期 (Date)	2017/11/16		

## Specification For MHNTX3001 、 MHNRX3001 HDMI Extender Module

### Features

- ▶ Flexible and scalable HDMI 1080p High Quality Video Broadcasting with Ethernet LAN.
- ▶ Extends 1080p HDMI signals up to 150m/500ft. over a single UTP Cat5e/6 cable.
- ▶ Multicasting and broadcasting architecture, adding more displays without adding LAN bandwidth loading. Compatible with video player S/W likes VLC, etc.
- ▶ Support Point-to-Point, Point-to-Many and Many-to-Many network configuration.
- ▶ With Universal IR Remote Control function ( 30KHz ~ 60KHz )
- ▶ Built-in 3 bits DIP switch for RS232 ( RS485 ) Baud rate setting

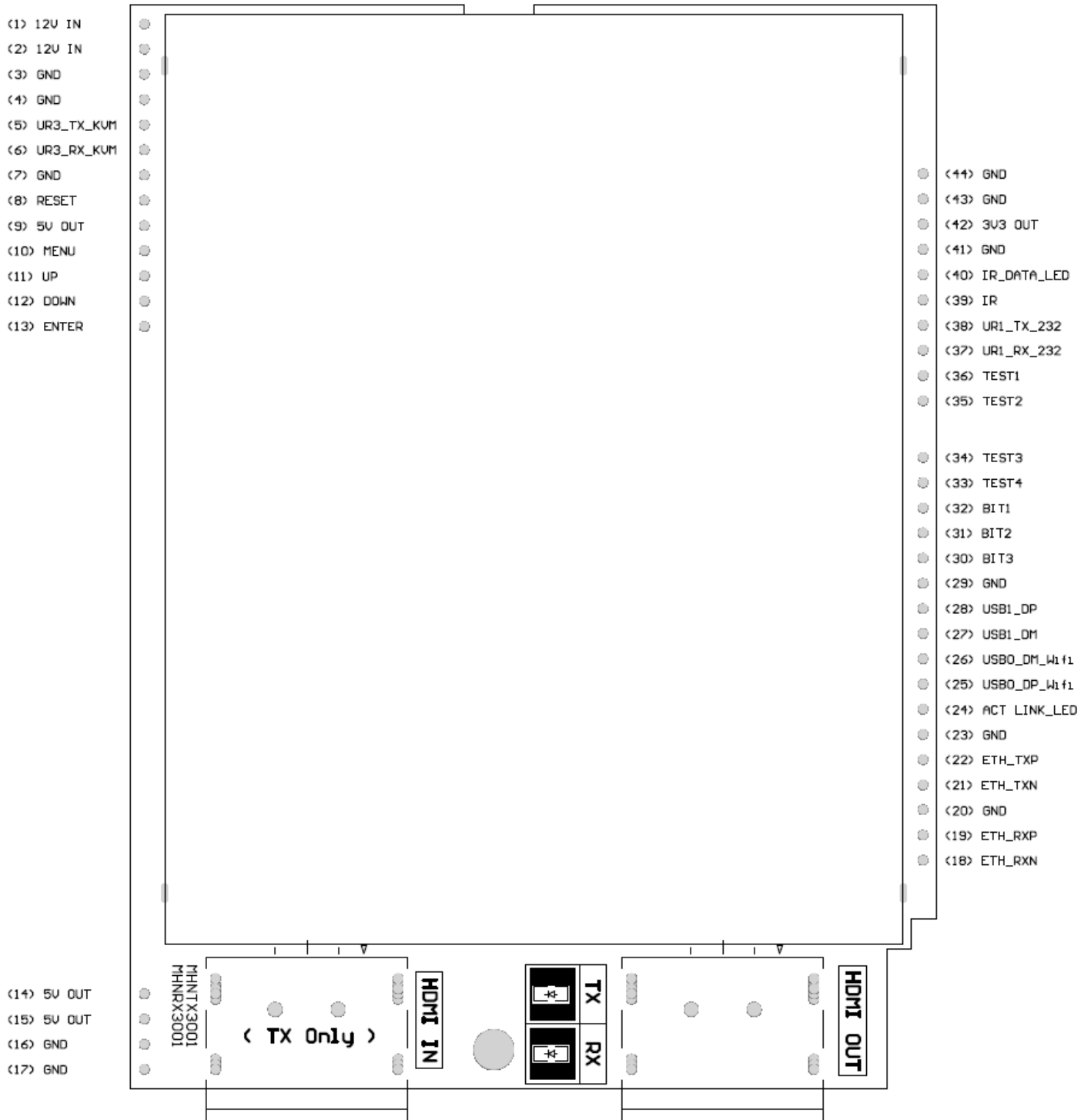
## ◆ Specifications

System	
<b>Protocol</b>	IP, TCP, UDP, RTP, RTCP, IPv4, DHCP, HTTP, IGMP, ICMP, MULTICAST, UNICAST
<b>Ethernet</b>	10 BASE-T/100 BASE-TX RJ45 with 1 LEDs for status indicate.
<b>Video Encoding and Decoding Protocols</b>	H.264 Baseline / Main / High profile level 4.2
<b>Streaming Bit Rate</b>	Up to 12Mbps
<b>HDMI Format</b>	1080p 50 / 60 , 1080i 50 / 60 , 1080p 25 / 30 , 720p 50 / 60 ,480p 50 / 60 , 480i 50 / 60 Support HDMI 1.4a and w/ or w/o HDCP
<b>RS232 Baud Rate Setting</b>	3 BIT DIP Switch for baud rate selection
<b>IR Remote Control</b>	With Universal IR Remote Control function ( 30KHz ~ 60KHz )
<b>HDMI Connector</b>	TX – HDMI IN x 1 HDMI OUT x 1 → Loop thru function  RX – HDMI OUT x 1

Parameter	Min.	Typ.	Max.	Unit
<b>Electrical Section</b>				
Supply Voltage		12V		V
Supply current in TX mode			350	mA
Supply current in RX mode			175	mA
Latency time		<180		ms
<b>Digital input pin</b>				
High level input voltage	2.0	~	3.6	Vpp
Low level input voltage	-0.3	~	0.8	Vpp
<b>Digital output pin</b>				
High level output voltage	2.4			Vpp
Low level output voltage			0.4	Vpp
<b>Operation</b>				
Operating Temperature	0	~	+55	°C
Storage Temperature	-20	~	+70	°C

# ◆ Pins Assignment

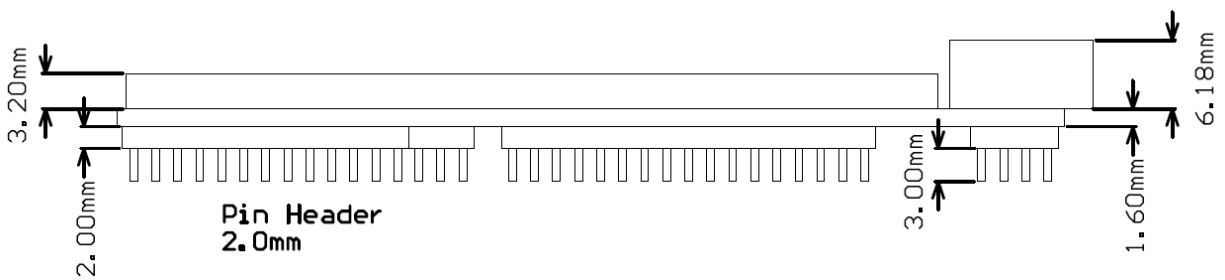
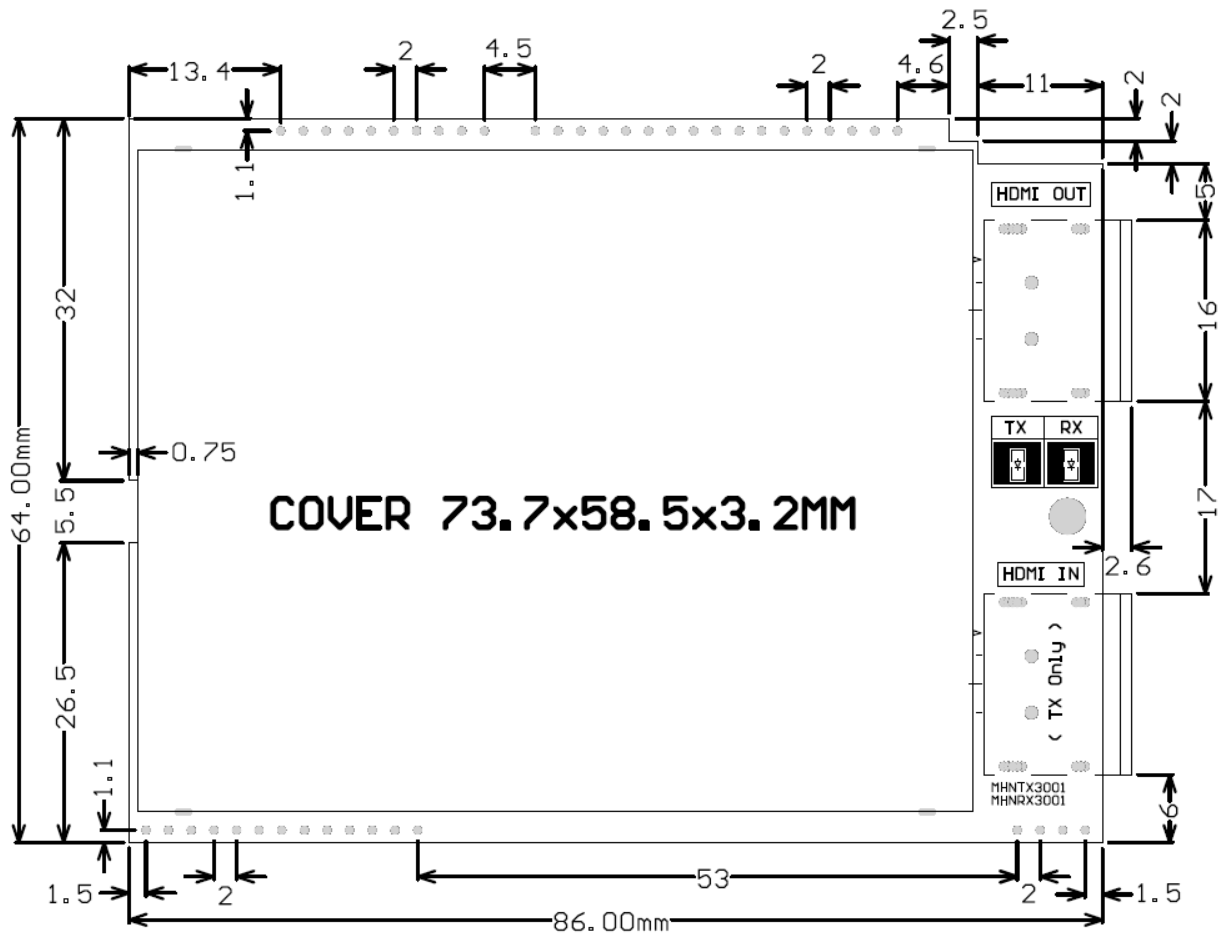
## MHNTX3001 & MHNRX3001



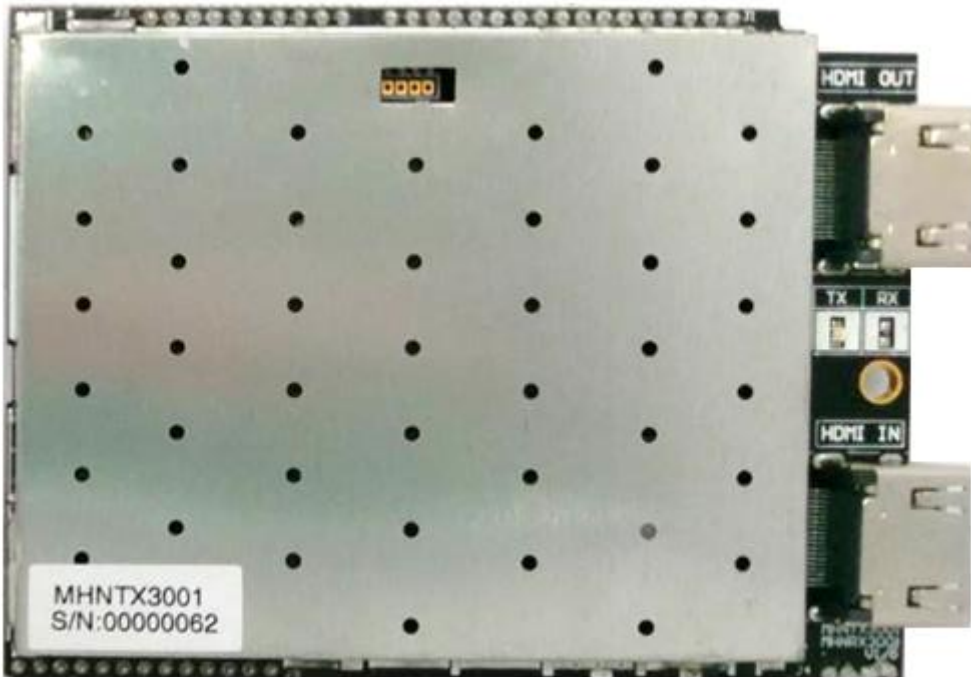
Pin No.	Name	I/O	Function Description	
1	12V IN	I	DC 12V IN	
2	12V IN	I	DC 12V IN	
3	GND	-	Ground	
4	GND	-	Ground	
5	UR3_TX_KVM	O	UART3 TX for KVM	
6	UR3_RX_KVM	I	UART3 RX for KVM	
7	GND	-	Ground	
8	RESET	I	System reset	
9	5V OUT	O	DC 5V OUT	
10	MENU	-	TX	Open : HD Short to GND : Fluent
			RX	Reserve
11	UP	-	TX	Open : Unicast ( 1T1R ) Short to GND : Multicast ( 1T nR )
			RX	Reserve
12	DOWN	-	Reserve	
13	ENTER	-	Reserve	
14	5V OUT	O	DC 5V OUT	
15	5V OUT	O	DC 5V OUT	
16	GND	-	Ground	
17	GND	-	Ground	
18	ETH_RXN	I	10/100 PHY RX -	
19	ETH_RXP	I	10/100 PHY RX +	
20	GND	-	Ground	
21	ETH_TXN	O	10/100 PHY TX -	
22	ETH_TXP	O	10/100 PHY TX +	
23	GND	-	Ground	
24	ACT LINK_LED	O	Action LED	
25	USB0_DP_Wifi	I/O	USB0 DATA +	
26	USB0_DM_Wifi	I/O	USB0 DATA -	
27	USB1_DM	I/O	USB1 DATA -	
28	USB1_DP	I/O	USB1 DATA +	
29	GND	-	Ground	

30	BIT3	I	RS232 Baud Setting BIT3
31	BIT2	I	RS232 Baud Setting BIT2
32	BIT1	I	RS232 Baud Setting BIT1
33	TEST4	-	ID Setting 4
34	TEST3	-	ID Setting 3
35	TEST2	-	ID Setting 2
36	TEST1	-	ID Setting 1
37	UR1_RX_232	I	UART1 RX for RS232
38	UR1_TX_232	O	UART1 TX for RS232
39	IR	I/O	TX : IR LED OUT RX : IR Sensor IN
40	IR_DATA_LED	O	IR DATA LED
41	GND	-	Ground
42	3V3 OUT	O	DC 3.3V OUT
43	GND	-	Ground
44	GND	-	Ground

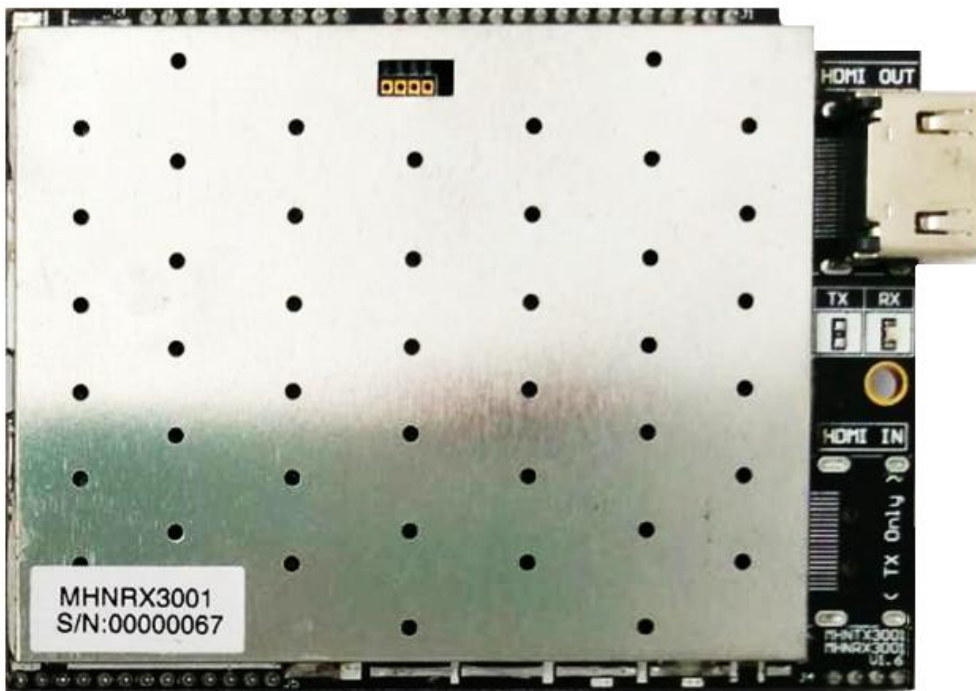
### ◆ Mechanical Dimension



●MHNTX3001

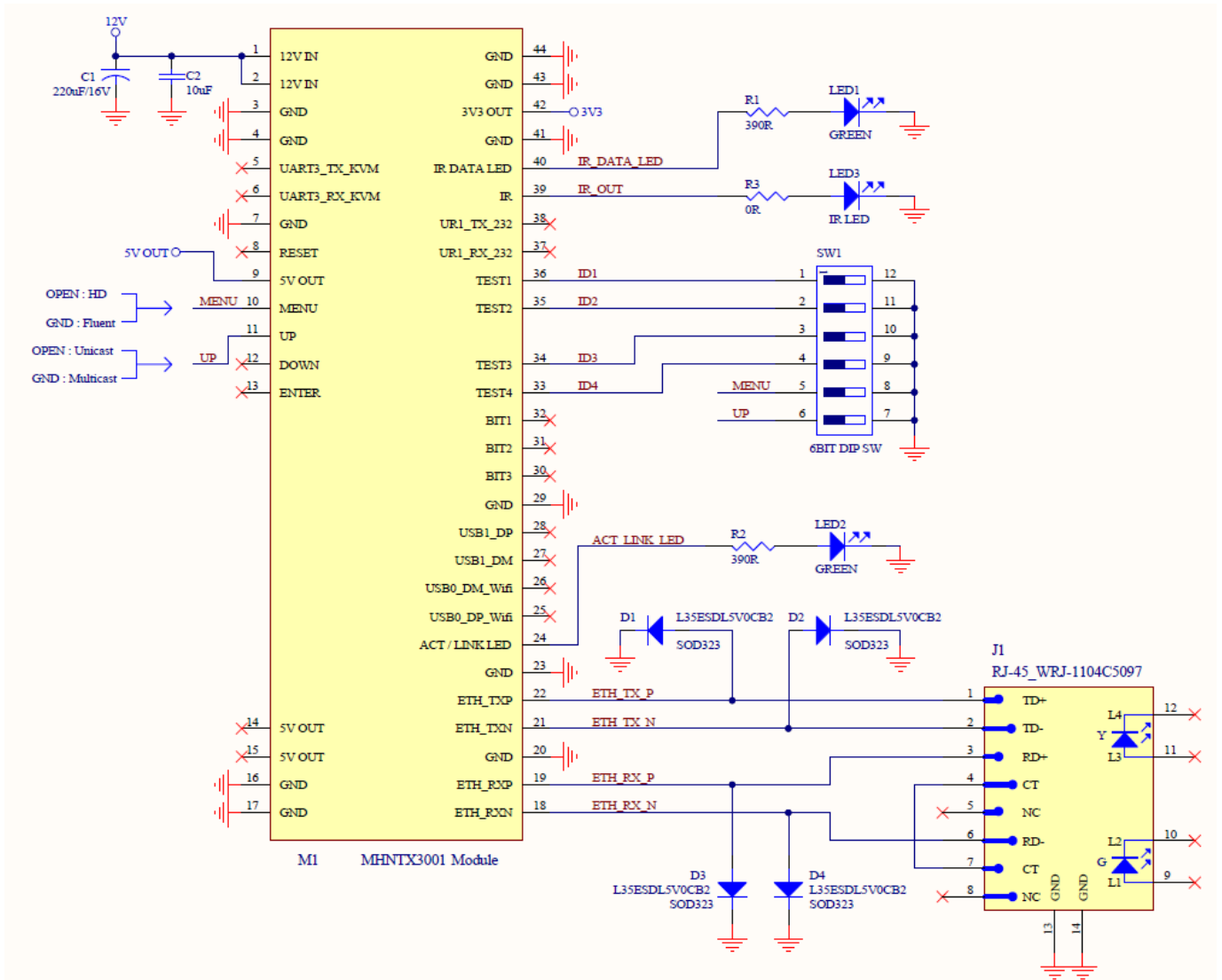


●MHNRX3001





# ◆ Application Circuit - MHNTX3001



### ◆ Application Circuit - MHNRX3001

