

RJ UTC Series

RJ102 RX for Camera module

General Description

The RJ UTC (Up The Coax) series support CCTV camera OSD control via Coaxial cable by using remote controller.

This coaxitron receiver and transmitter let our end-user enjoy more easy & simple way to install camera and control camera OSD.

RJ102 – UTC Receiver

RJ102 will decode the command and send the command to CCTV ISP with GPIO standard. It's perfect for all kind of ISP.

RJ201 – UTC Transmitter

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Once user presses key button on the remote controller and then RJ201 will send the command through video line to the RJ UTC Receiver which on the camera module.

Product Features

- Small packaged IC
- Low cost
- Simple external component

Application

- Analog CCTV On-Screen-Display Control
- Digital Video Recorder OSD control



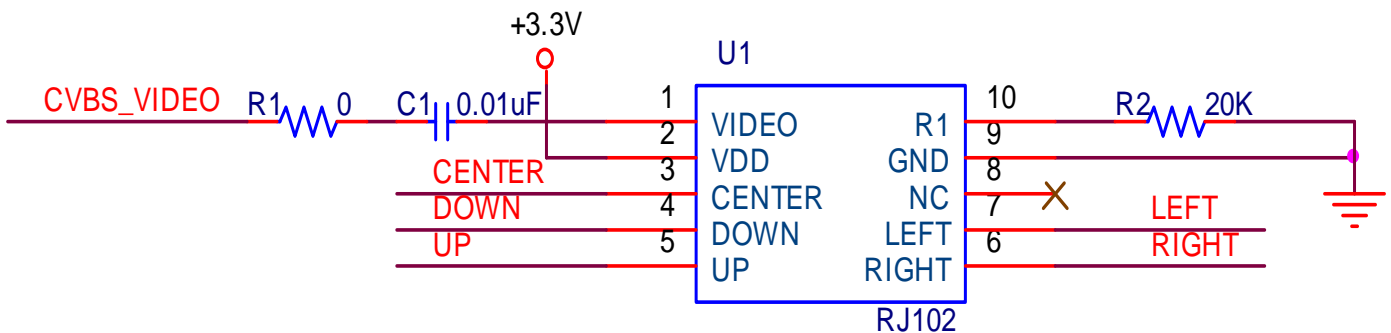
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RJ102 Pin Description (MSOP 10)



SYMBOL	PIN	PAD	DESCRIPTION
UTC_IN Video	1	I/O	Clamped Video Signal
VDD	2	-	VDD Supply Voltage
GPIO_CENTRE	3	O	Center Key Open Drain NMOS Output
GPIO_DOWN	4	O	Down Key Open Drain NMOS Output
GPIO_UP	5	O	Up Key Open Drain NMOS Output
GPIO_RIGHT	6	O	Right Key Open Drain NMOS Output
GPIO_LEFT	7	O	Left Key Open Drain NMOS Output
NC	8	-	No Connect, Remain Float
GND	9	-	Ground
RI	10	O	Connect a 20K resistor for adjusting frequency



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Absolute Maximum Ratings

Parameter	Symbol	Condition	MIN	MAX	Unit
Supply Voltage	V_{DD}		-0.5	6	V
Supply Current	I_{DD}	$V_{DD} = 3V$, no Load	-50	50	mA
Input Voltage	V_{IN}		GND-0.3	$V_{DD} + 0.3$	V
Output Voltage	V_{OUT}		GND-0.3	$V_{DD} + 0.3$	V
DC input Current	I_{IN}		-10	10	mA
DC output Current	I_{OUT}		-10	10	mA
Operating Temperature	T_{stg}		-40	85	°C
Storage Temperature	T_{stg}		-65	150	°C
Total Power Dissipation	P_{tot}		-	400	mW

DC Characteristic

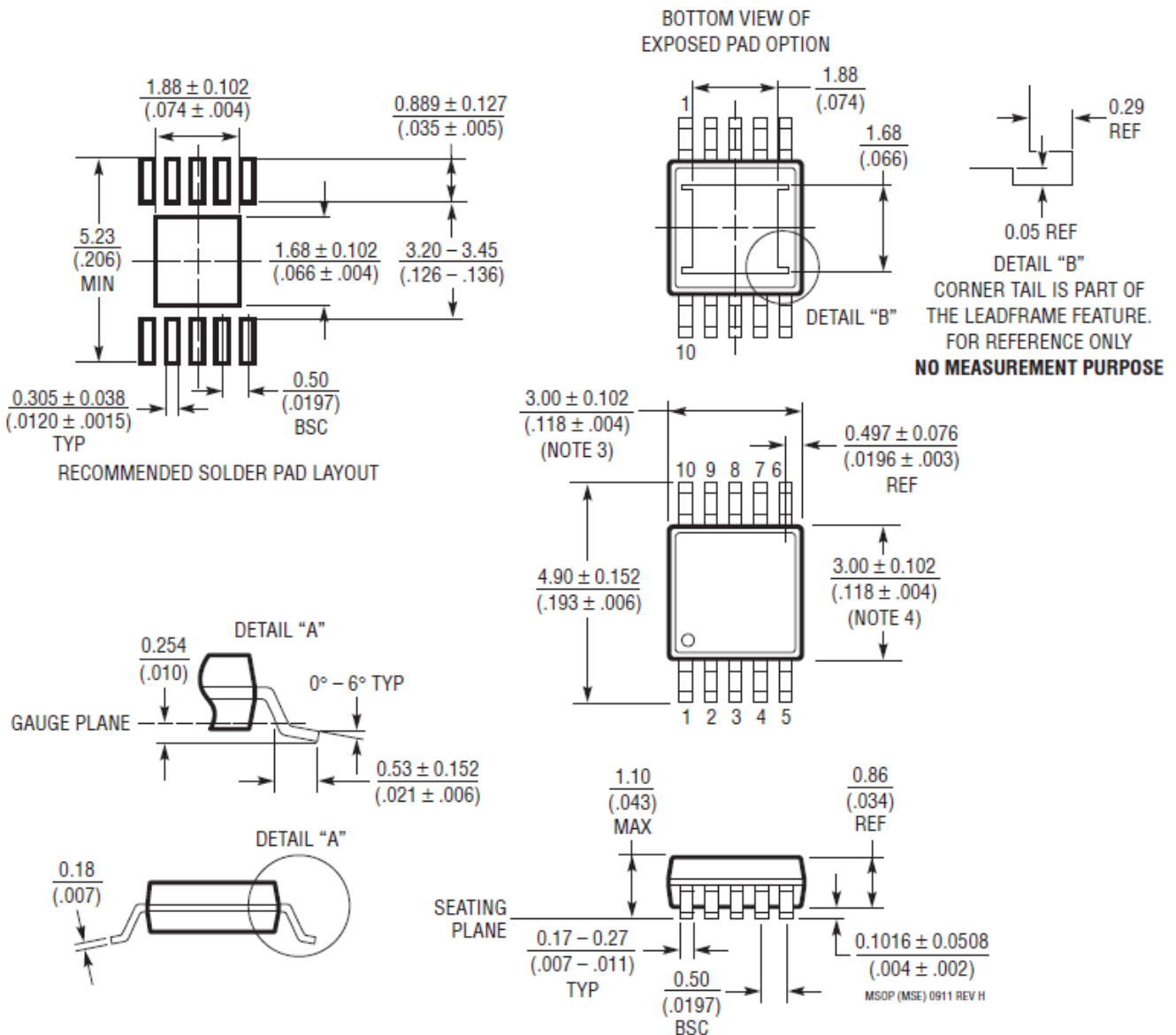
	Parameter	Symbol	Condition	MIN	TYP	MAX	Unit
Supplies	Supply Voltage	V_{DD}		2.7	-	3.6	V
	Standby Current	I_{DD}	Standby Mode	-	5		uA
	Operating Current	I_{opt}	Operating Mode	-	2.0	2.5	mA
Logic	LOW-level Input Voltage	V_{IL}		GND	-	$0.3 \cdot V_{DD}$	V
	HIGH-level Input Voltage	V_{IH}		$0.7 \cdot V_{DD}$	-	V_{DD}	V
	LOW-level Output Current	I_{OL}	$V_{OL} = 1.0V$	1	-	-	mA
	HIGH-level Output Current	I_{OH}	$V_{OH} = 2.0V$	-1	-	-	mA

$V_{DD} = 3.0V$; $T_{amb} = 25^{\circ}C$; unless otherwise specified

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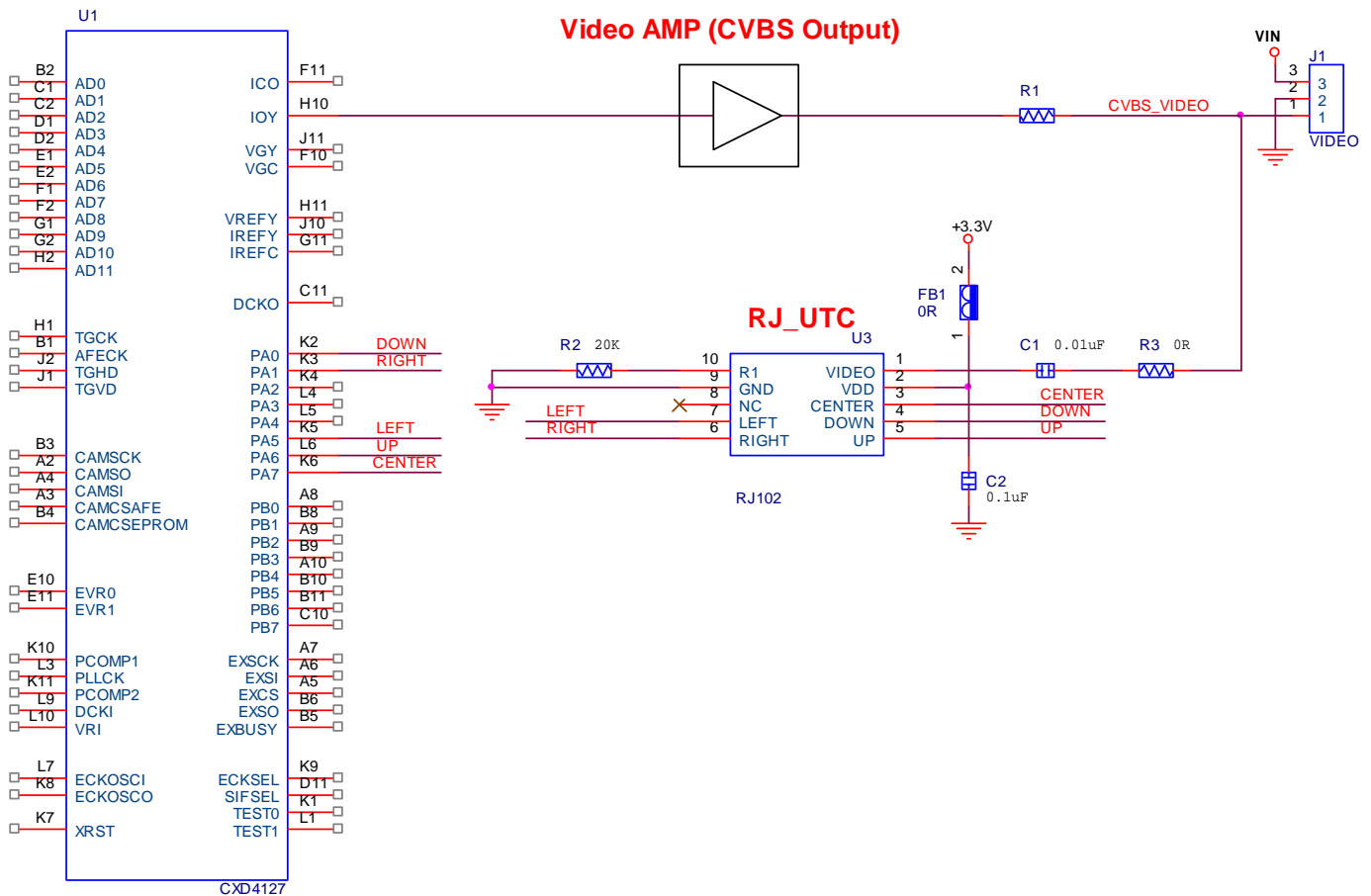
RJ102 Package Dimension (MSOP 10)



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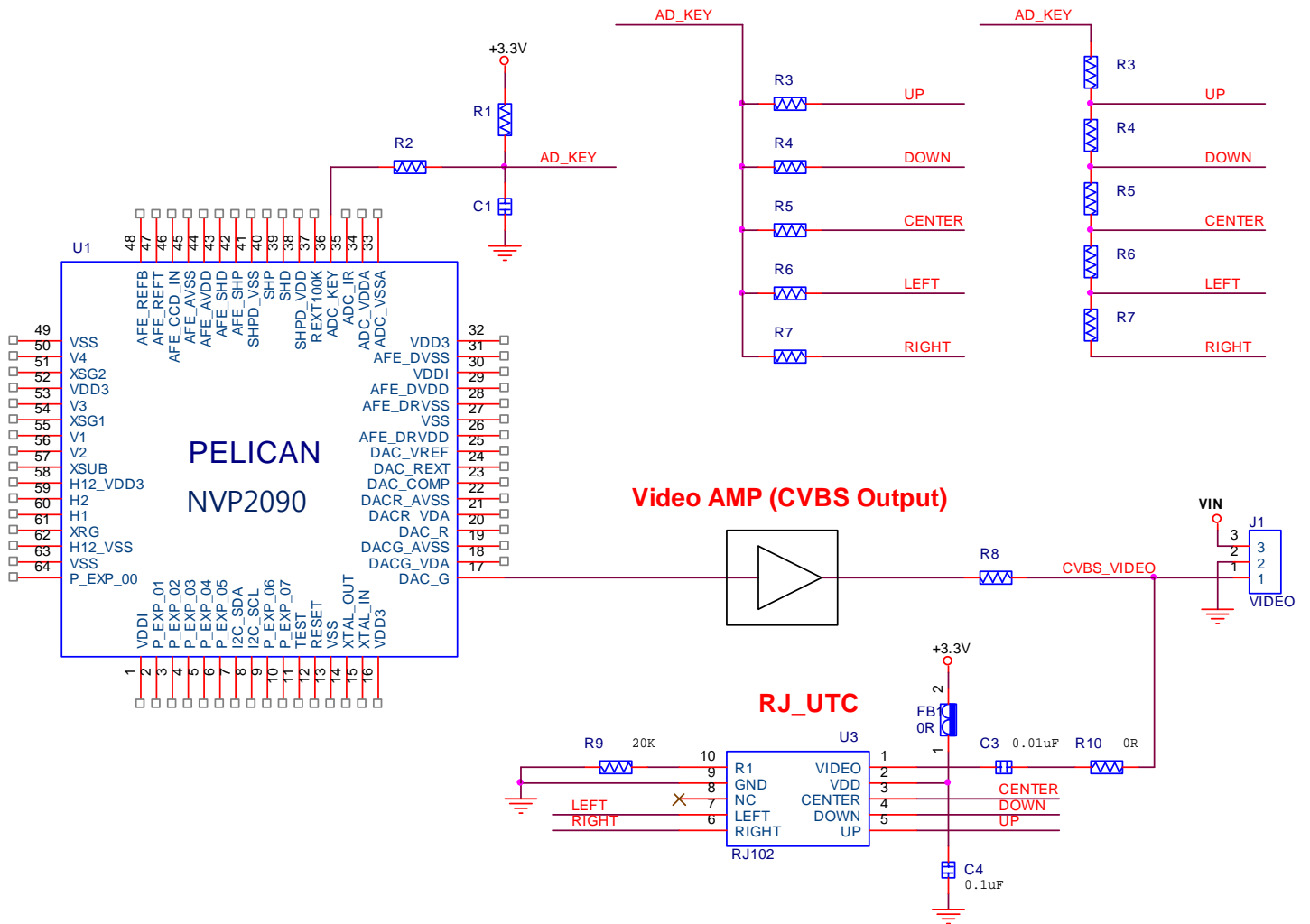
RX circuit for SONY EFFIO-E with RJ102



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RX circuit for NEXTCHIP NVP2090 with RJ102



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RX circuit for RJ7S / RJ9S with RJ102

