LAMPIRAN

Data Sheet Komponen IC yang Terdapat pada Rangkaian:

1. IC 14024

7-Stage Ripple Counter

The MC14024B is a 7-stage ripple counter with short propagation delays and high maximum clock rates. The Reset input has standard noise immunity, however the Clock input has increased noise immunity due to Hysteresis. The output of each counter stage is buffered.

- Diode Protection on All Inputs
- Output Transitions Occur on the Falling Edge of the Clock Pulse
- Supply Voltage Range = 3.0 Vdc to 18 Vdc
- Capable of Driving Two Low-power TTL Loads or One Low –
 power Schottky TTL Load Over the Rated Temperature Range
- Pin-for-Pin Replacement for CD4024B

MAXIMUM RATINGS (Voltages Referenced to V_{SS}) (Note NO TAG)

Symbol	Parameter	Value	Unit	
V _{DD}	DC Supply Voltage Range	-0.5 to +18.0		
V _{in} , V _{out}	Input or Output Voltage Range (DC or Transient)			
I _{in} , I _{out}	Input or Output Current (DC or Transient) per Pin	±10	mA	
P _D	Power Dissipation, per Package (Note NO TAG)	500	mW	
T _A	Ambient Temperature Range	rature Range -55 to +125		
T _{stg}	Storage Temperature Range -65 to +150		°С	
TL	Lead Temperature (8–Second Soldering)	260	°C	

This device contains protection circuitry to guard against damage due to high static voltages or electric fields. However, precautions must be taken to avoid applications of any voltage higher than maximum rated voltages to this high-impedance circuit. For proper operation, Vin and Vout should be constrained to the range VSS _ (Vin or Vout) _ VDD. Unused inputs must always be tied to an appropriate logic voltage level (e.g., either VSS or VDD). Unused outputs must be left open.

PIN ASSIGNMENT						
сгоск [1•	14	J v _{DD}			
RESET [NC			
O7 [3	12] Q1			
Q6 [4	11] Q2			
Q5 [5	10] нс			
Q4 [9] Q3			
v _{ss} [7	8	нс			
V _{OD} = PIN 14 V _{SS} = PIN 7 NC = NO CONNECTION						

2. IC 14042

Quad Transparent Lacth

The MC14042B Quad Transparent Latch is constructed with MOSP-channel and N-channel enhancement mode devices in a single monolithic structure. Each latch has a separate data input, but all four latches share a common clock. The clock polarity (high or low) used to strobe data through the latches can be reversed using the polarity input. Information present at the data input is transferred to outputs Q and Q during the clock level which is determined by the polarity input.

When the polarity input is in the logic "0" state, data is transferred during the low clock level, and when the polarity input is in the logic "1" state the transfer occurs during the high clock level.

- Buffered Data Inputs
- Common Clock
- Clock Polarity Control
- Q and Q Outputs
- Double Diode Input Protection
- Supply Voltage Range = 3.0 Vdc to 1 8 Vdc
- Capable of Driving Two Low-power TTL Loads or One Low-power Schottky TTL Load Over the Rated Temperature Range

MAXIMUM RATINGS (Voltages Referenced to V_{SS}) (Note 2.)

Symbol Parameter		Value	Unit	
V _{DD}	DC Supply Voltage Range	-0.5 to +18.0	٧	
V _{in} , V _{out}	Input or Output Voltage Range (DC or Transient)	-0.5 to V _{DD} + 0.5	V	
lin, lout	Input or Output Current (DC or Transient) per Pin			
Po	Power Dissipation, per Package (Note 3.)	500	mW	
T _A	Ambient Temperature Range -55 to +125		°C	
T _{stg}	Storage Temperature Range	-65 to +150 °C		
TL	Lead Temperature (8–Second Soldering)	260	°C	

This device contains protection circuitry to guard against damage due to high static voltages or electric fields. However, precautions must be taken to avoid applications of any voltage higher than maximum rated voltages to this high-impedance circuit. For proper operation, Vin and Vout should

be constrained to the range VSS _ (Vin or Vout) _ VDD. Unused inputs must always be tied to an appropriate logic voltage level (e.g., either VSS or VDD). Unused outputs must be left open.

PIN ASSIGNMENT

03 [1 •	16] V _{DD}
Q0 [2	15] Q 3
₹0 [3	14] D3
D0 [4	13] D2
CLOCK [5	12] Q2
POLARITY [6	11] Q2
D1 [7	10] Q1
Vss [8	9] Q1

TRUTH TABLE

Clock	Polarity	Q
0	0	Data
1	0	Latch
4.4	1	Data
0	1	Latch

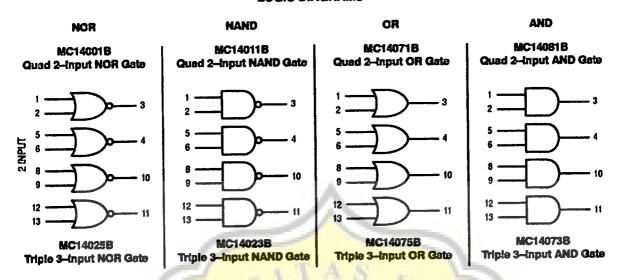
3. IC 14001

B-Suffix Series CMOS Gate

The B series logic gates are constructed with P and N channel enhancement mode divice in a single monolithic structure. The primary use in where low power dissipation and high noise immunity is desired.

- Supplay voltage range = 3.0 Vdc to 18 Vdc
- All outputs buffered
- Capable of driving two low-power TTL loads or one low-power schottky TTL load over the rated temperature range
- Double diode protection on all inputs except: triple diode protection on MC14011B and MC 14081B
- Pin-for-pin replacements for corresponding CD4000 series B suffix device (exeptions: MC14068B and MC 14078B)

LOGIC DIAGRAMS

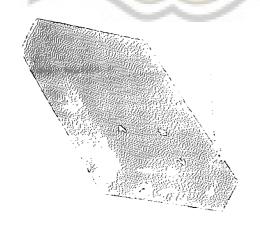


PIN ASSIGNMENTS

MC14001B Quad 2-Input NOR Gate		MC14002B Qual 4-Input NOR Gate		MC14011B Quad 2-input NAND Gate		MC14012B Dual 4-Input NAND Gate		
DN 1 _A (10	14 D VDD	OUTA (1 0	14 D VDD	IN1A [10	14 D V _{DD}	О∪ТА [1 •	14 D VDD
IN 2 _A		13 DN 2D	N 1A [2	13 00ТВ	IN 2A [2	13] IN 2 _D	IN 1A C 2	13 J OUTB
OUT _A		12 D 10	IN 2A [] 3	12] IN48	оитд [] з	12 J IN 1 _D	IN 2A [3	12] IN 48
OUTB (11 DOUTD	N 3A [4	11] IN38	оитв [4	11) OUTD	IN 3 _A [4	11] IN 3 _B
IN 1 _B (10 DUTC	N 4A [5	10] IN 2B	IN 18 [5	10 DOUTC	IN 4 _A E 5	10 3 IN 2 _B
N 2 _B [9] IN 2C	NC [6	9 3 IN 1 _B	012B [6	9] IN 2C	NC [6	9] IN 1 _B
v _{ss} [8 I IN 1C	VSS [7	8 INC	V _{SS} [7	8] IN 1 _C	V _{SS} [7	8] NC

Specification Pemancar Kamera CCTV (Video Sender):

VIDEO SENDER



OPERATING INSTRUCTIONS

Thank you for using Wireless VIDEO SENDER. This leaflet contains complete instructions for the installation and operation of VIDEO SENDER. It describes features and the location and use of controls. Read all materials enclosed before attempting to operate the unit.

GENERAL INFORMATION

VIDEO SENDER wirelestly transmit Video/Audio signals over-the-air to the receiving TV within a range more than 100 ft. It eliminates the problems of extending or re-connecting cables. It is just like a miniproadcasting station.

To transmit recorded pictures from your VCR, you simply connect the Video/Audio sutput connections on your VCR directly to the Video/A dio suput connections on the VIDEO SENDER.

To transmit live video partires, you plug in any standard Video Camera (color or B/N) to the Video/Audio input connections on VIDEO SENDER.

Now, the pictures (live or recorded) can be viewed on any television tuned to the indicated channel.

FEATURES

- Ensure the stability and accuracy of the frequency transmitten by crystal osciation.
- 2. Uses low-level radio w. ves, no radio license is needed
- 3. Uses for power supp AC power adoptor 10V 13.8V
- Versatile application: Can be applied to (1) VCR (2) Video Camera (3) N. ro-Computer/TV game (4) TV monitoring system.

LOCATION AND USE OF CONTROLS

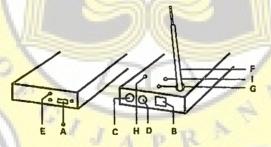
- A. Power on/off switch
- B. 12 Volts DC socket for AC adaptor
- C. Audie in
- D. Video in
- E. Power on lamp
- = Antenna
- G. Video control
- H. Audio control
- Sound frequency control

ANTENNA FOR RECEIVING TV SET

20(t -- 50ft use rod antenna 50-100 use UHF indoor antenna 100(t priwards use UHF outdoor antenna

OPERATING PROCEDURE AND CAUTION

- Tune receiving TV set to the indicated channel.
- Insort antenna to VIDEO SENDER until a click is heard;
 with flexible antenna model, extend antenna to the full.
- Connect VIDEO SENDER either to Video Camera or VCR by enclosed cables as illustrated.
- 4. If you plug one end of the cables into Audio (Video) jack of your VCR or Video Camera, the other end for VIDEO SENDER. Audio (Video) jack must be of the same color.
- 5. Switch an the power switch on VIDEO SENDER.
- 6. Switch on your VCR or Video Camera.
- 7. Fine tune your TV set or adjust TV antenna to optimize sharp picture and clear sound.
- In a few cases, it may be necessary to adjust Audio/ Video controls of VIDEO SENDER to optimize picture display.
- Remove AC adaptor from wall outlet and VIDEO
 SENDER which is not in use for a prolonged period.



SPECIFICATION

- 1. Frequency Range: Standard Channel
- 2. Number of Channel: Single channel
- 3. Power input: AC adaptor (10V 13.8V DC)
- 4. Power Consumption: 10mA maximum
- 5. Antenna Impedance: 50 Ohms
- 6. Video Input: 1.0 Volt peak to peak/75 Ohms
- 7. Audio Input: 0.1-1.0 Volts RMS/600 Ohms
- 8. Weight: 0.45 lb
- 9. Dimensions: 70m/m(W) x 20m/m(H) x 123m/m(L)

Bentuk Robot:

