



## GENERAL DESCRIPTION

SM5032C/D is an infrared remote control decoder utilizing COMOS technology, paired with SM5021 for transmitter. The remote control system is capable of controlling eight functions and CP1 to CP6 can multi-decode. There is an option for two toggle signal outputs in these data control functions.

Also there are two custom codes for user to separate different products.

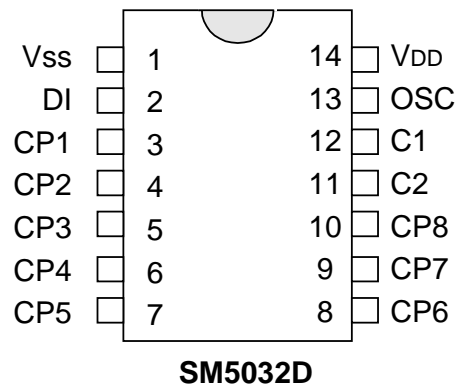
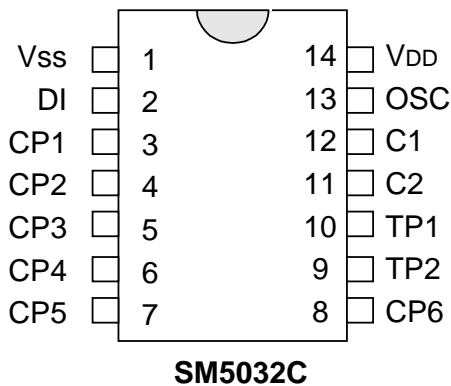
## APPLICATIONS

- \* Consumer Products Remote Control
- \* Toy Remote Control
- \* Audio Remote Control

## FEATURES

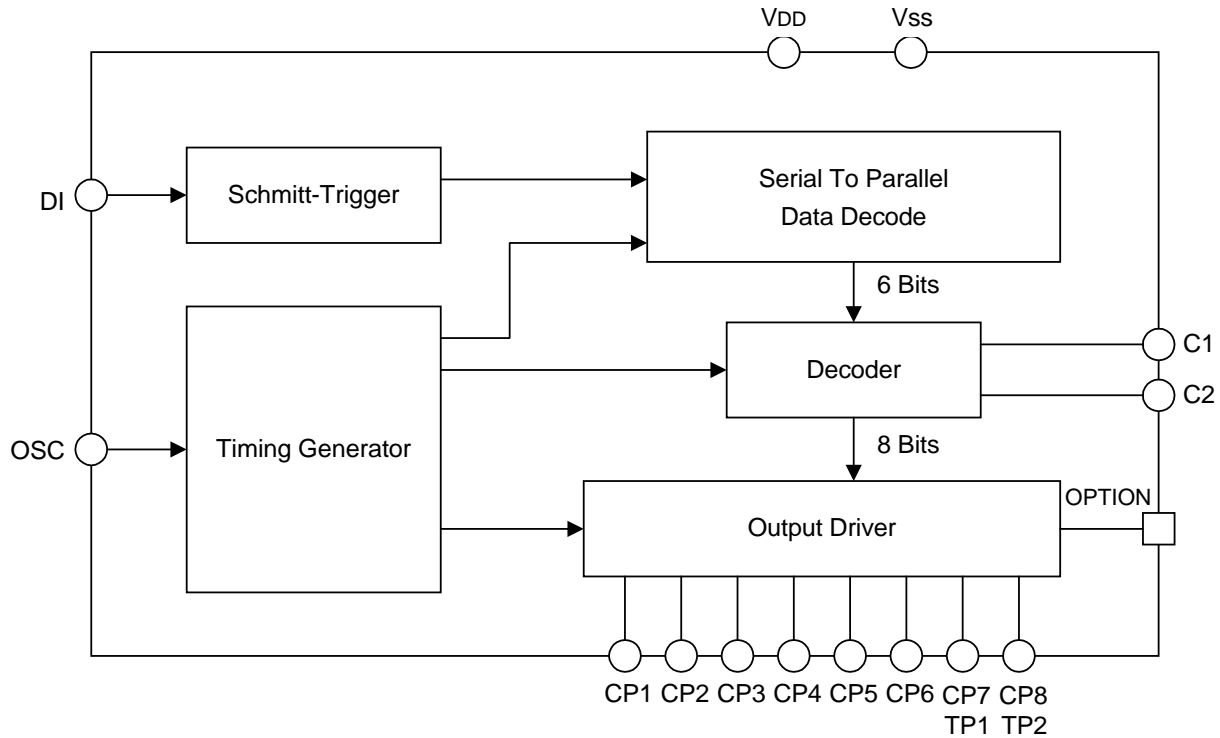
- \* Wide operation voltage range, 2.4V to 6V
- \* Infrared remote control receiver
- \* Two custom code to separate products
- \* Eight control functions for continuous signal
- \* Multit-key control outputs
- \* Two toggle signal can be optioned in outputs
- \* A single terminal type oscillator by means of RC is provided
- \* Low power consumption
- \* High noise immunity
- \* 14 pin DIP or SO package

## PIN ASSIGNMENTS





## BLOCK DIAGRAM



## PIN DESCRIPTION

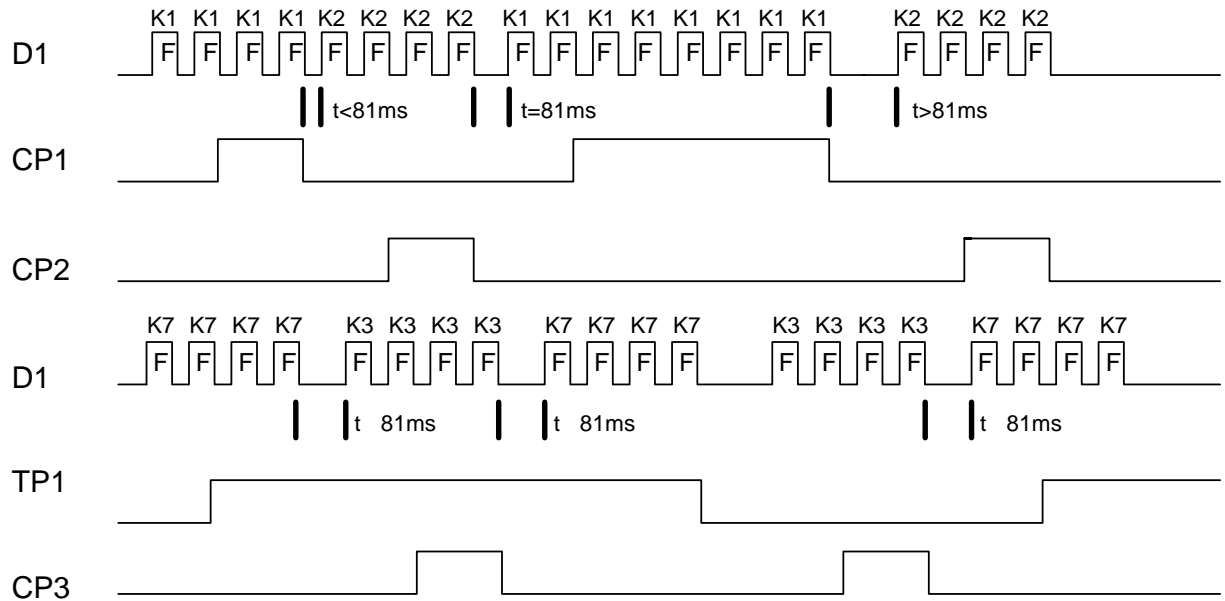
Pin Name	I/O	Function
Vss	POWER	Negative power supply
DI	I	Signal Input
CP1 ~ CP6	O	Multi-key control outputs
CP7,CP8(TP2/TP1)		Single-dey control outputs (Toggle function option)
C1,C2	I	Custom code
OSC	I	38KHz OSC pin
VDD	POWER	Positive power supply





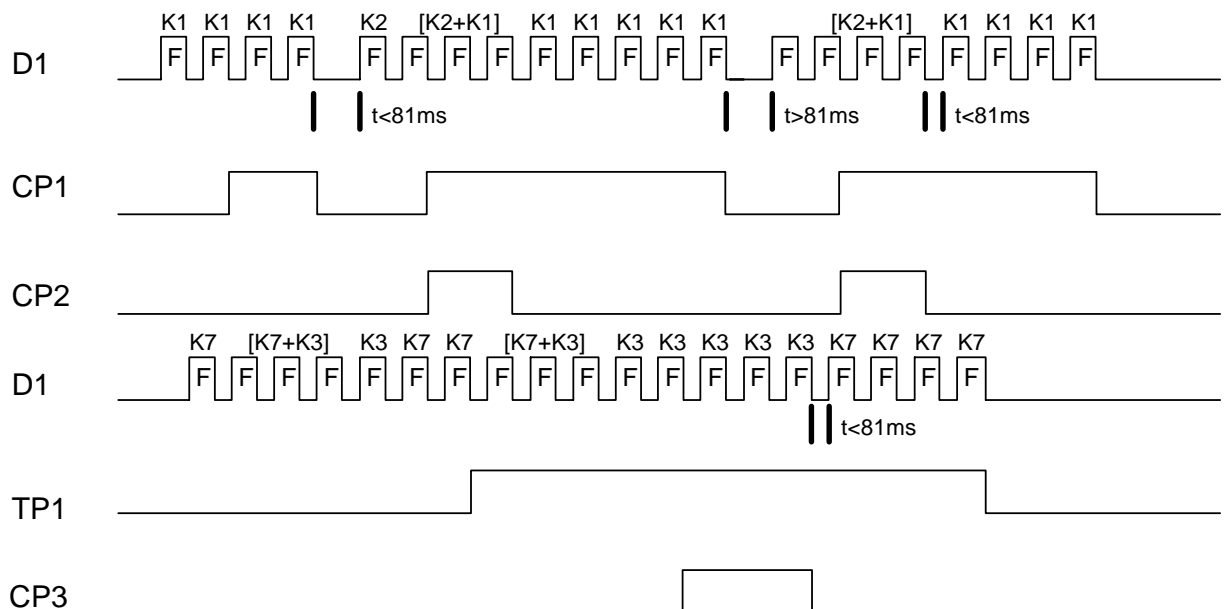
### C. Receiver Waveform

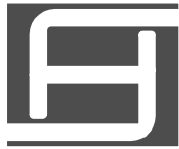
Normal Condition ( Paired With SM5021A )



Overlap Condition ( Paired With SM5021B )

If more than one data is received, multi-key decode available. ( Except for CP7/CP8 or TP1/TP2)





### ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Test Conditions	Parameter	Unit
Supply Voltage	VDD-Vss		-0.3 ~ 6	V
Input Voltage	VI		Vss - 0.3 ~ VDD + 0.3	V
Output Voltage	Vo		Vss - 0.3 ~ VDD + 0.3	V
Maximum Power Consumption	Pa	VDD-Vss=5V	500	mW
Operating Temperature	Topr		-10 ~ 70	
Storage Temperature	Tstg		-40 ~ 125	

### DC ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Conditions	Limits			Unit
			Min.	Typ.	Max.	
Supply Voltage	VDD		2.2	3	6	V
Stand-by Current	ISB	VDD - Vss = 3 V OSC stop all output pins open		1		μA
		OSC operation non-loading			300	
Input-high Level	VIH		1.5	2.1	3.5	V
Input Low Level	VIL		0.7	1	1.5	V
CP1 ~ CP8 Source Current	IOH	VOH = +2.4V			1	mA
CP1 ~ CP8 Sink Current	IOL	VOL = +0.8V			1	mA



APPLICATION CIRCUIT

