



IR CONTROL

M21/22

IR CONTROL

IR 控制器

FEATURES 功能叙述

- PIN compatible with 6121/22.
- DO with a 38 KHz carrier for IR.

P/N	PACKAGE	KEY
M21-001	S20	32
M21-002	S20	32
M22-001	S24	64
M22-002	S24	64

APPLICATION 产品应用

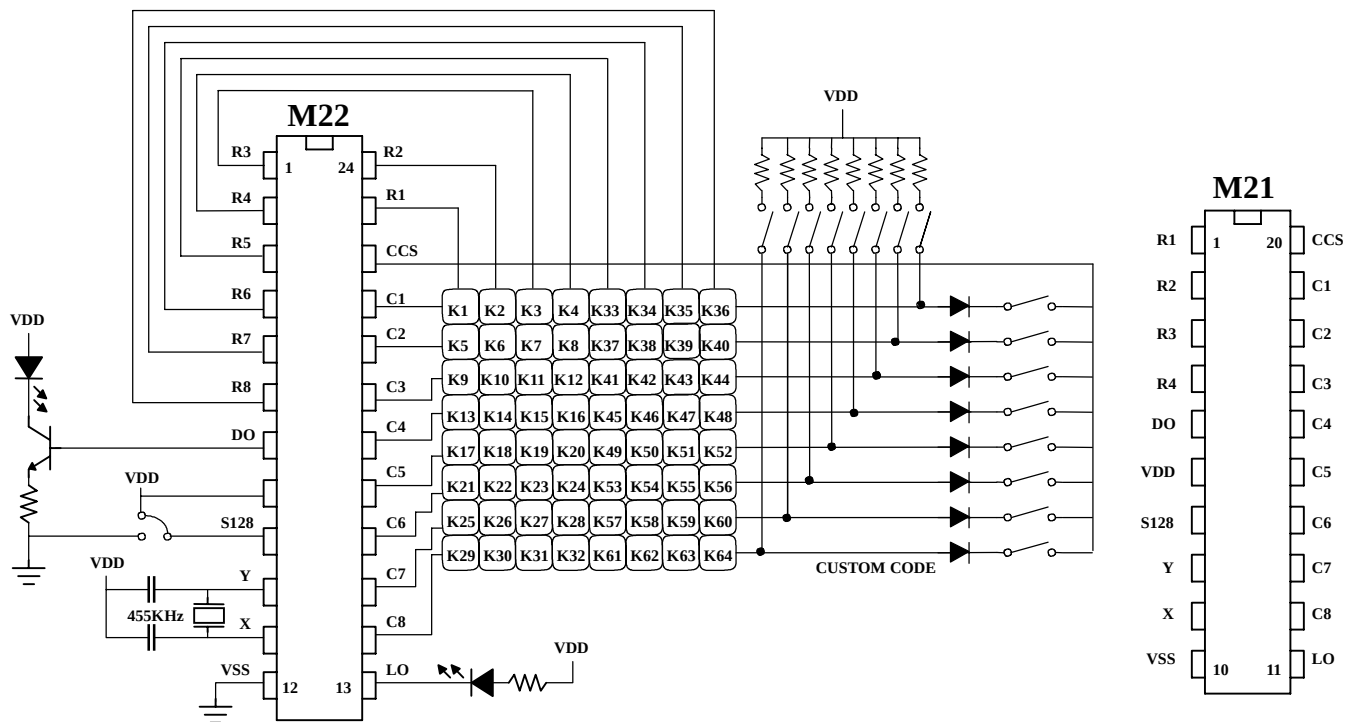
- Audio equipment, TV, VTR, Cassette desks, etc..

ELECTRICAL CHARACTERISTICS 电气规格

(@VDD=3V unless otherwise specified)

Characteristics	Sym.	Min.	Typ.	Max.	Unit	REMARKS
工作电压 Operating Voltage	V _{DD}	2	3	5	V	
工作电流 Operating Current	I _{OP}	—	0.3	1	mA	No load
静态电流 Quiescent Current	I _{SB}	—	1	10	μ A	
推动电流 Driving Current	I _{OL}	—	2	—	mA	@ V _{DS} =1.2V
振荡频率 Oscillator Frequency	F _{OSC}	—	455	—	KHz	External ± 30%
工作温度 Operating Temperature	Temp.	0	25	60	°C	

APPLICATION DIAGRAM 参考电路图



* All specs and applications shown above subject to change without prior notice.

(以上电路及规格仅供参考,本公司得径行修正)



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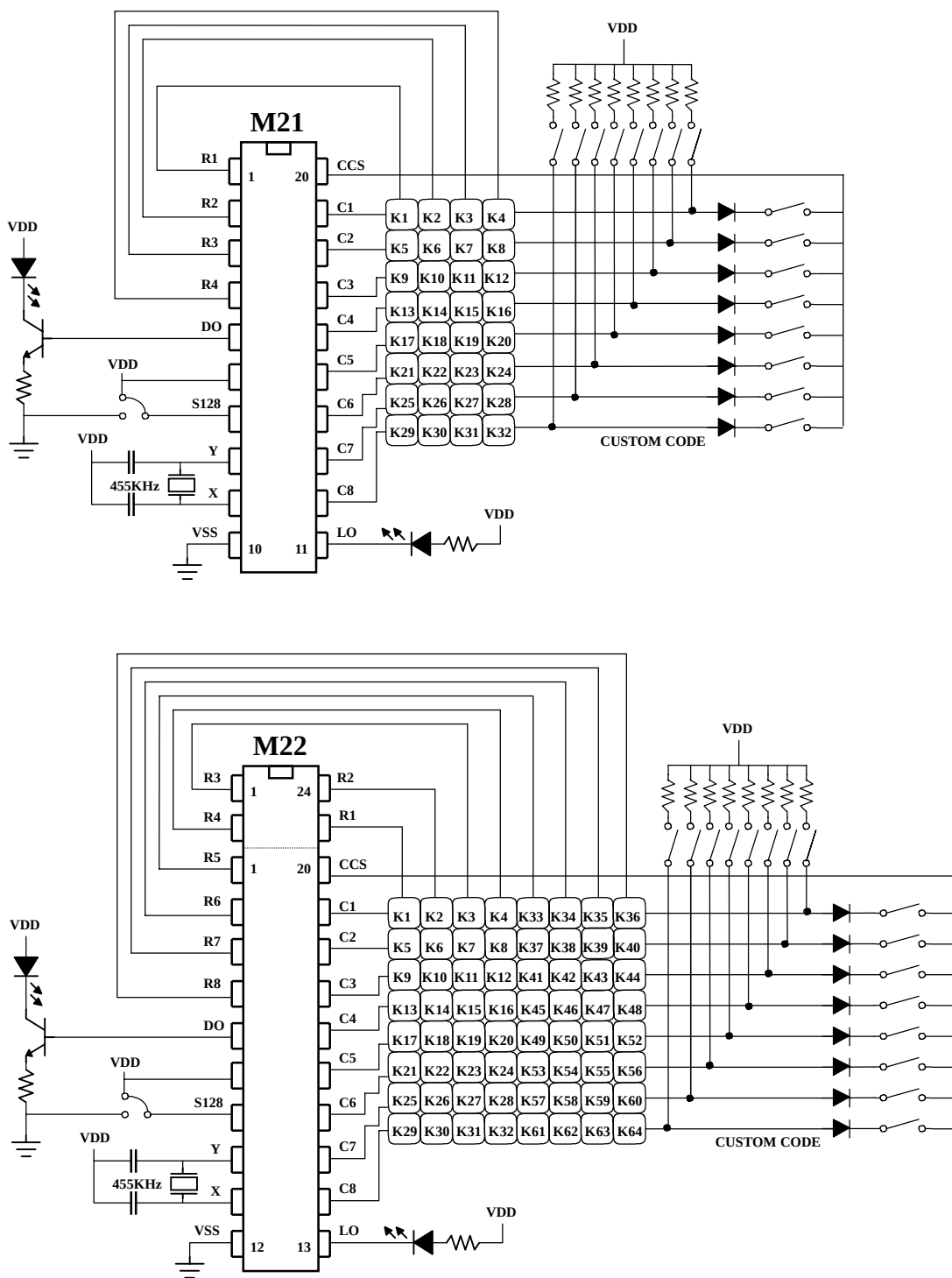
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APPLICATION DIAGRAM 参考电路图



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OUTPUT WAVEFORMS

KEY	C 1~8	R 1~8	D0	D1	D2	D3	D4	D5	D6	S128	KEY	C 1~8	R 1~8	D0	D1	D2	D3	D4	D5	D6	S128
K1	1	1	0	0	0	0	0	0	0	0/1	K33	1	5	0	0	0	0	0	0	1	0/1
K2	1	2	1	0	0	0	0	0	0	0/1	K34	1	6	1	0	0	0	0	0	1	0/1
K3	1	3	0	1	0	0	0	0	0	0/1	K35	1	7	0	1	0	0	0	0	1	0/1
K4	1	4	1	1	0	0	0	0	0	0/1	K36	1	8	1	1	0	0	0	0	1	0/1
K5	2	1	0	0	1	0	0	0	0	0/1	K37	2	5	0	0	1	0	0	0	1	0/1
K6	2	2	1	0	1	0	0	0	0	0/1	K38	2	6	1	0	1	0	0	0	1	0/1
K7	2	3	0	1	1	0	0	0	0	0/1	K39	2	7	0	1	1	0	0	0	1	0/1
K8	2	4	1	1	1	0	0	0	0	0/1	K40	2	8	1	1	1	0	0	0	1	0/1
K9	3	1	0	0	0	1	0	0	0	0/1	K41	3	5	0	0	0	1	0	0	1	0/1
K10	3	2	1	0	0	1	0	0	0	0/1	K42	3	6	1	0	0	1	0	0	1	0/1
K11	3	3	0	1	0	1	0	0	0	0/1	K43	3	7	0	1	0	1	0	0	1	0/1
K12	3	4	1	1	0	1	0	0	0	0/1	K44	3	8	1	1	0	1	0	0	1	0/1
K13	4	1	0	0	1	1	0	0	0	0/1	K45	4	5	0	0	1	1	0	0	1	0/1
K14	4	2	1	0	1	1	0	0	0	0/1	K46	4	6	1	0	1	1	0	0	1	0/1
K15	4	3	0	1	1	1	0	0	0	0/1	K47	4	7	0	1	1	1	0	0	1	0/1
K16	4	4	1	1	1	1	0	0	0	0/1	K48	4	8	1	1	1	1	0	0	1	0/1
K17	5	1	0	0	0	0	1	0	0	0/1	K49	5	5	0	0	0	0	1	0	1	0/1
K18	5	2	1	0	0	0	1	0	0	0/1	K50	5	6	1	0	0	0	1	0	1	0/1
K19	5	3	0	1	0	0	1	0	0	0/1	K51	5	7	0	1	0	0	1	0	1	0/1
K20	5	4	1	1	0	0	1	0	0	0/1	K52	5	8	1	1	0	0	1	0	1	0/1
K21	6	1	0	0	1	0	1	0	0	0/1	K53	6	5	0	0	1	0	1	0	1	0/1
K22	6	2	1	0	1	0	1	0	0	0/1	K54	6	6	1	0	1	0	1	0	1	0/1
K23	6	3	0	1	1	0	1	0	0	0/1	K55	6	7	0	1	1	0	1	0	1	0/1
K24	6	4	1	1	1	0	1	0	0	0/1	K56	6	8	1	1	1	0	1	0	1	0/1
K25	7	1	0	0	0	1	1	0	0	0/1	K57	7	5	0	0	0	1	1	0	1	0/1
K26	7	2	1	0	0	1	1	0	0	0/1	K58	7	6	1	0	0	1	1	0	1	0/1
K27	7	3	0	1	0	1	1	0	0	0/1	K59	7	7	0	1	0	1	1	0	1	0/1
K28	7	4	1	1	0	1	1	0	0	0/1	K60	7	8	1	1	0	1	1	0	1	0/1
K29	8	1	0	0	1	1	1	0	0	0/1	K61	8	5	0	0	1	1	1	0	1	0/1
K30	8	2	1	0	1	1	1	0	0	0/1	K62	8	6	1	0	1	1	1	0	1	0/1
K31	8	3	0	1	1	1	1	0	0	0/1	K63	8	7	0	1	1	1	1	0	1	0/1
K32	8	4	1	1	1	1	1	0	0	0/1	K64	8	8	1	1	1	1	1	0	1	0/1



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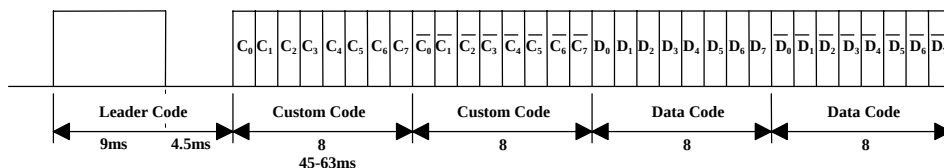
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TRANSMISSION CODE

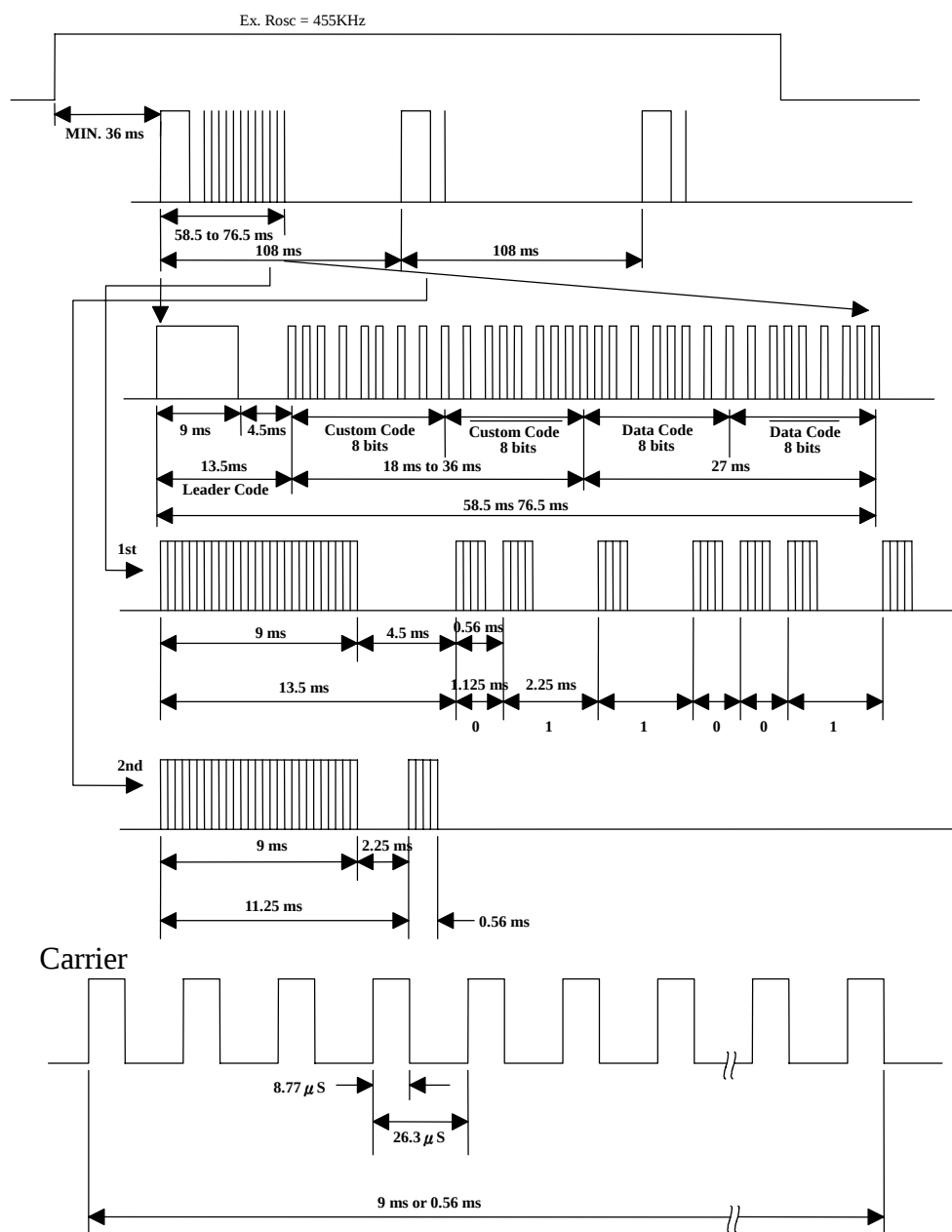
(1) DO output 38 KHz

The transmission code consists of a leader code, 16-bit custom codes, and 8-bit data codes.

The inverse code of the data code is also sent simultaneously.



Output Waveforms





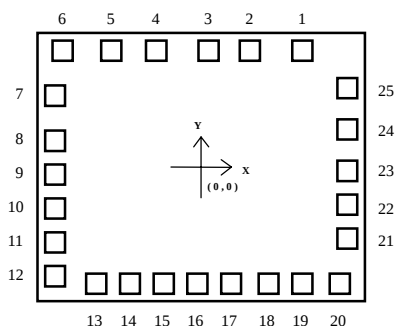
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PAD ASSIGNMENT & POSITION



UNIT : μm

No.	NAME	X	Y
1	KIO6	542	600.7
2	KIO5	265.1	600.7
3	KIO4	57.5	600.7
4	KIO3	-217.9	600.7
5	KIO2	-438.3	600.7
6	KIO1	-701.1	600.7
7	KIO0	-743.3	358.3
8	CCS	-743.3	123.7
9	KI0	-743.3	-49.3
10	KI1	-743.3	-222.3
11	KI2	-521.6	-395.3
12	KI3	-348.6	-568.3
13	KI4	-521.6	-600.8
14	KI5	-348.7	-600.8
15	KI6	-175.5	-600.8
16	KI7	-2.6	-600.8
17	REM	170.4	-600.8
18	VDD	352.4	-600.8
19	SEL	525.4	-600.8
20	OSCO	710.8	-600.8
21	OSCI	743.3	-373.8
22	OPT	743.3	-200.8
23	VSS	743.3	-30.8
24	LMP	743.3	185.5
25	KIO7	743.3	411.6

* CHIP SIZE $\sim 1.9 \times 1.7 \text{ mm}^2$

* IC substrate should be connected to VDD in PCB (PCB 上 IC 底座必须接 VDD)

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