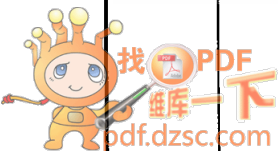


MICROCOMPUTER and PERIPHERAL LSI's

Peripheral LSI's

Type No.	Function	Maximum Ratings (Ta=25°C)	Electrical Characteristics (Ta=25°C)								
			Item	Symbol	Condition	min.	typ.	max.	Unit		
MN6024	CMOS 16-Function Remote Control Circuit	VDD=-0.3~+3V	"H" Level Input Voltage	VIH	OSC1, OSC2	1.1		1.5	V		
		VI=-0.3~VDD+0.3V	"L" Level Input Voltage	VIL				0.3	V		
		VO=-0.3~VDD+0.3V	Input Current	IIH	KY1~KY2, VI=1.5V	7	15		μA		
		Topr=-20~+70℃	"H" Level Out put Current	IOH1	DT1~DT4, VO=1.2V	-100			μA		
		Tstg=-40~+100℃	"L" Level Output Current	IOH2	OUT1, VDD=1.1V, VO=0.8V	-600			μA		
			"L" Level Output Current	IOL1	OUT1, VDD=1.1V, VO=0.3V	15			μA		
		Operating Condition	"H" Level Output Current	IOH3	OUT2, VDD=1.1V, VO=0.8V	-300			μA		
			"L" Level Output Current	IOL2	CUT2, VDD=1.1V, VO=0.3V	15			μA		
		VDD=1.5V	"H" Level Output Current	IOH4	OSC2, OSC3, VO=1.2V	-60			μA		
		VSS=0V	"L" Level Out put Current	IOL3	OSC2, OSC3, VO=0.3V	60			μA		
fosc=600Hz											
Ta=25℃											
ΔMN6025	CMOS Multi-Function Remote Control Circuit	VDD=-0.3~+5V	Supply Current	IDD		Without key input			30	μA	
		VI=-0.3~VDD+0.3V	Power Consumption	Ptot					60	μW	
		VO=-0.3~VDD+0.3V	Input Pin	KY1~ KY7	"H" Level Voltage	VIH	2.4			V	
		"L" Level Voltage			VIL			0.6	V		
		Input Current			II	VI=3V	10	50	μA		
		Topr=-30~+70℃	Operating Condition	CMT OSC2 MODE	"H" Level Voltage	VIH	2.4			V	
		"L" Level Voltage			VIL			0.6	V		
		Tstg=-35~+100℃	Out- put Pin	DT1~ DT4	"H" Level Current	IOH1	VO=2.4V	-100			μA
		"H" Level Current			IOH2	VO=0.8V	-1.5			mA	
		OUT		"L" Level Current	IOL2	VO=0.6V	50			μA	
				"H" Level Current	IOH3	VO=2.4V	-100			μA	
		VDD=3V		OSC1	"L" Level Current	IOL3	VO=0.6V	100			μA
VSS=0V											
Ta=25℃											
MN6044	CMOS Frequency Synthesizer for TV	VDD=-0.3~+7V	Supply Curren	IDD		Without load		1	5	mA	
		VI=-0.3~+7V	Power Consumption	Ptot			RC=1/3667, SC=1/1023	5	25	mW	
		VO=-0.3~+7V	Input Pin	LF1	Input Frequency Upper Limit	fi	3.7			MHz	
		Input Voltage Swing			Vi	1			Vp-p		
		Input Current			II	VI=VSS~VDD			±30	μA	
		PD=30mW	PI0~3 CI0~2 LDI	"H" Level Input Voltage	VIH2		2.4		VDD	V	
		"L" Level Output Current		VIL2		VSS		0.8	V		
		Topr=-20~+70℃	PDO	"H" Level Output Current	IOH	VO=3V	-0.8			mA	
		Tstg=-55~+100℃		"L" Level Output Voltage	IOL	VO=2V	+0.8			mA	
		VDD=5V	TMO	"H" Level Output Voltage	VOH	IOH=-100μA	3			V	
VSS=0V	"L" Level Output Voltage	VOL		IOL=100μA			0.4	V			
Ta=-20~+70℃	Q1, QO	Osc. Frequency	fosc		C1=22pF, C0=30±10pF		3.58		MHz		
MN6047	CMOS PLL Frequency Synthesizer for FM/AM Radio	VDD=-0.3~+10V	Supply Current	IDD		VDD=5V, Ta=25℃		3	5	mA	
		VI=-0.3~+10V	Power Consumption	Ptot				15	25	mW	
		VO=-0.3~+10V	"H" Level Inp ut Voltage	VIH	P0~P3, C0~C2, LD,	2.4		VDD	V		
		PD=50mW	"L" Level Inp ut Voltage	VIL	VDD=5V		VSS		0.8	V	
		Topr=-30~+70℃	Input Frequency Upper Limit	fi max:	VDD=4.5~6.5V	4			MHz		
					VDD=5.5~6.5V	6			MHz		
		Tstg=-55~+100℃	Oscillation Frequency	fosc		OSC1, OSC2		11.52		MHz	
		Operating Condition	"H" Level Output Current	IOH	PD	VO=3V	-0.8			mA	
			"L" Level Ou put Current	IOL		VO=2V	0.8			mA	
		VDD=5V	"H" Level Output Voltage	VOH	CPO, QO	VDD=5V IOH=-100μA	4			V	
VSS=0V	"L" Level Ou put Voltage	VOL	VDD=5V IOL=100μA				0.4	V			
Ta=-30~+70℃	Input Capacitance	CI		VI=2V		5		pF			
	Output Capac tance	CO		VO=2V		7		pF			



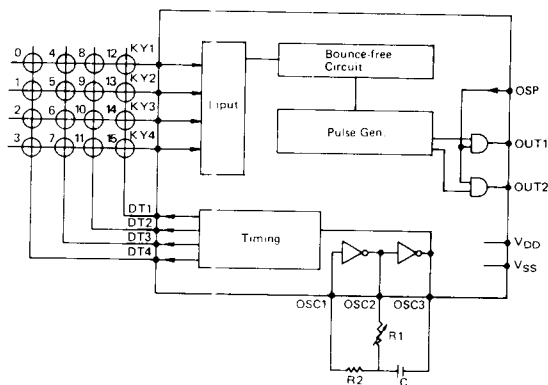
MICROCOMPUTER and PERIPHERAL LSI's

Peripheral LSI's

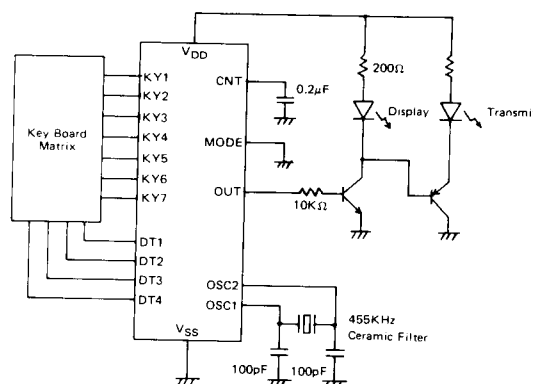
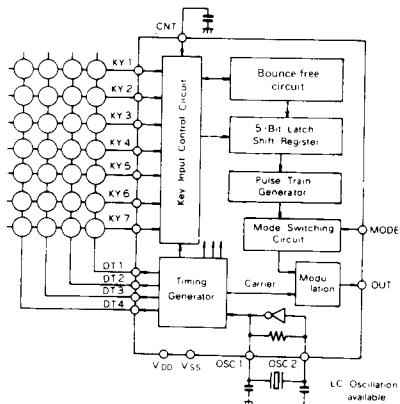
Block Diagram

Application Circuit

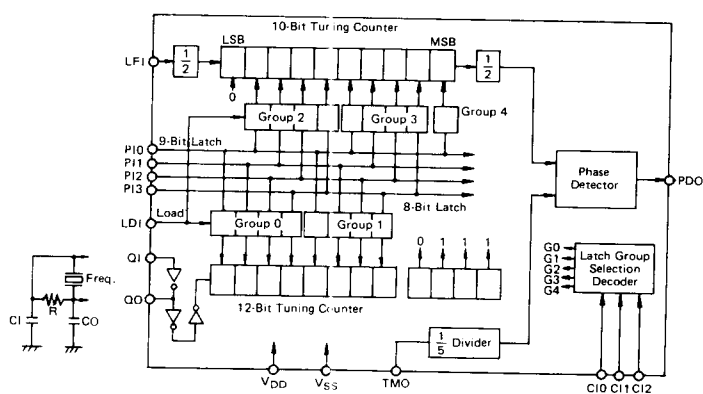
MN6024 (Package L-13, 16-Lead Plastic DIL)



MN6025 (Package L-15, 18-Lead Plastic DIL)



MN6044 (Package L-14, 16-Lead Plastic DIL)



MN6047 (Package L-13, 16-Lead Plastic DIL)

