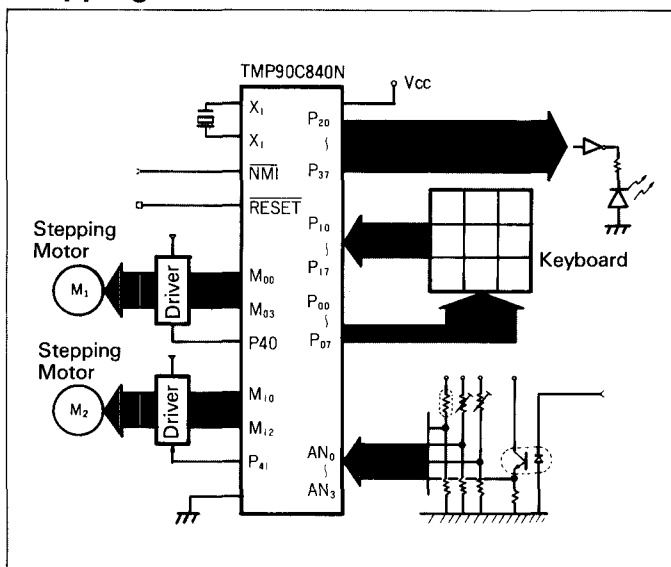
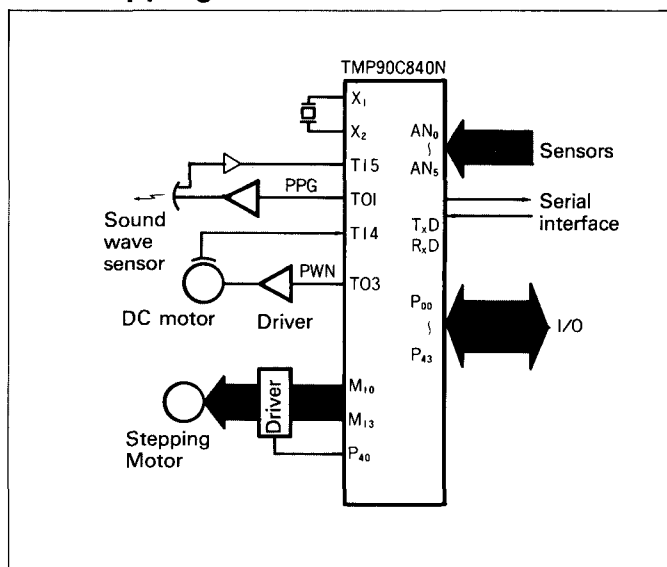


Application Circuit Examples

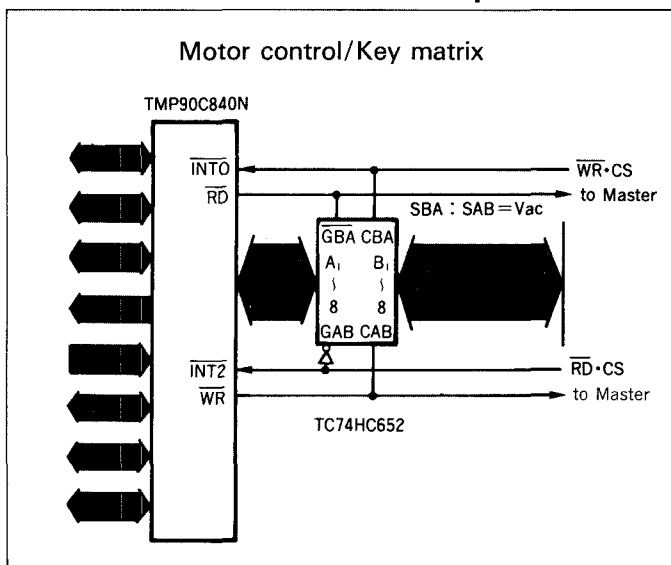
Stepping Motor Control Circuit



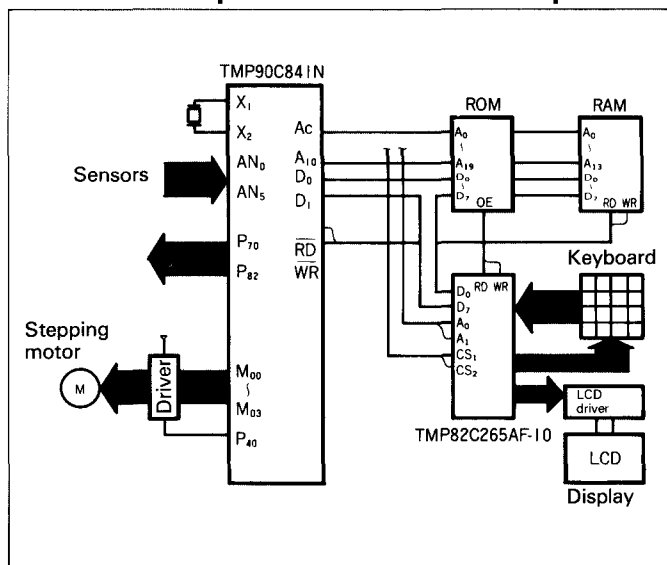
DC/Stepping Motor Control Circuit



Slave Processor Circuit Example



Data Area Expansion Circuit Example



TLCS-48 Series Microcontrollers

- **TLCS-48 Series (CMOS)**

Type No.		ROM (bit)	RAM (bit)	I/O ports (bit)	Minimum instruction execution time (μs)	Power supply voltage (V)	Maximum power supply current (mA)	Operating temperature (°C)	No. of pins	
									P	V
TMP80C48AP-6	TMP80C48AU-6 (TMP80C35AP-6)	1024×8 (4096 External)	64×8	27(19)	2.5	4.0~6.0	10<0.01>	-40~85	40	44
TMP80C48AP	TMP80C48AU (TMP80C35AP)				1.36	4.5~5.5	15<0.01>	-40~85		
TMP80C49AP-6	TMP80C49AU-6 (TMP80C39AP-6)	2048×8 (4096 External)	128×8		2.5	4.0~6.0	10<0.01>	-40~85		
TMP80C49AP	TMP80C49AU (TMP80C39AP)				1.36	4.5~5.5	15<0.01>	-40~85		
TMP80C50AP-6	TMP80C50AU-6 (TMP80C40AP-6)	4096×8 (4096 External)	256×8		2.5	4.0~6.0	10<0.01>	-40~85		
TMP80C50AP	TMP80C50AU (TMP80C40AP)				1.36	4.5~5.5	15<0.01>	-40~85		
TMP82C43P		I/O expander				4.0~6.0	2	-40~85	24	—

(Notes): Packages P: Plastic Standard DIP, U: Micro Flat Package

< > Hold current. (): When ROMs are externally mounted