

## APPLICATION SPECIFIC IC (CONTINUED)

Function	Type No.	Package Outline	Water Process	Features	Usage/Field
N-type Laser diode driver with self APC function	M66515FP	20P2N-A	High-speed Bip	<ul style="list-style-type: none"> <li>Includes self APC circuit</li> <li>High-speed switching 40Mbps</li> <li>Permits bias current establishment 30mA</li> </ul>	<ul style="list-style-type: none"> <li>Laser beam printer, communication, digital PPC</li> </ul>
R-type Laser diode driver with self APC function	M66516FP	24P2N-B	High-speed Bip	<ul style="list-style-type: none"> <li>Includes self APC circuit</li> <li>Permits bias current establishment 30mA</li> </ul>	
N-type Laser diode driver with self APC function	M61880FP	★ 20P2N-A	High-speed Bip	<ul style="list-style-type: none"> <li>Includes self APC circuit</li> <li>High-speed switching 200Mbps</li> <li>Permits bias current establishment 40mA</li> </ul>	
CCD clock driver	M66700P/WP	8P4/16P4	High-speed Bip	<ul style="list-style-type: none"> <li>Output amplitude 12V</li> <li>Can be directly driven by TTL</li> <li>High-speed operation</li> </ul>	<ul style="list-style-type: none"> <li>Fax, digital PPC</li> <li>Driving CCD sensor of a scanner</li> </ul>
	M66701P	8P4			
	M66705P/FP	16P4/16P2N-A			

## 13 CONTROL IC AND OTHERS

### LCD CONTROLLERS AND DRIVERS

Application	Type No.	Function	Typical electrical characteristics				Package outline	Remarks
			V <sub>DD</sub> (V)	V <sub>LCD</sub> MAX (V)	I <sub>DD</sub> (mA)	I <sub>LCD</sub> MAX (μA)		
LCD Controllers and drivers	M50530-XXXFP	LCD Control with 256-Word RAM, 256 Character & LCD Drive with 40 Column, 32 Common	5	14	5	100	100P6	CMOS Standard ROM M50530-001FP
LCD Controllers and drivers	M50532-XXXFP	LCD Control with 256-Word RAM, 256 Character & LCD Drive with 50 Column, 32 Common	5	14	5	100	128P6D	CMOS Standard ROM M50532-002FP
LCD Driver	M50521FP	40 Channel LCD Drive (20ch+20ch)	5	14	1.5	100	60P6	CMOS
	M50524FP	80 Channel LCD Drive (40ch+40ch)	5	14	2	100	100P6	CMOS

### DRIVER ICs

- Bipolar stepper motor drivers

Type No.	Circuit function	Typical electrical characteristics (T <sub>a</sub> = 25°C)				Package outline	Remarks
		Supply voltage (V)	Low-level output current (mA)	High-level output current (mA)	Output with-stand voltage (V)		
M54640P	Bipolar Stepper Motor Driver with Chopper Control of the phase current	24	20	800	45	16P4	
M54670P	Bipolar Stepper Motor Driver with Chopper Control of the 2-phase current	24	20	800	40	32P4B	
M54671SP	Bipolar Stepper Motor Driver with Chopper Control of the 2-phase current	12	20	1200	28	32P4B	
M54672SP	Bipolar Stepper Motor Driver with Chopper Control of the 2-phase current	12	20	1200	28	32P4B	

- Latched drivers

Type No.	Circuit function	Circuit format	Typical electrical characteristics (T <sub>a</sub> = 25°C)				Package outline	Remarks
			Supply voltage (V)	Supply current (mA)	output with-stand voltage (V)	High-level output current (mA)		
M54972P/FP	8-Bit Serial-Input Latched Driver	Bi-CMOS	5	6.0*	30	300	16P4/16P2N	
M54974P	12-Bit Serial-Input Latched Driver	Bi-CMOS	5	10*	30	400	22P4B-A	
M54975P/FP	8-Bit Serial-Input Latched Driver	Bi-CMOS	5	1.2*	30	300	16P4/16P2N	
M54977P	12-Bit Serial-Input Latched Driver	Bi-CMOS	5	1.0*	30	200	20P4	
M54992P/FP	24-Bit Serial-Input Latched Driver	Bi-CMOS	5	3.5*	30	100	36P4E/36P2R	
M54992AP	24-Bit Serial-Input Latched Driver	Bi-CMOS	5	3.5*	30	100	36P4E	
M54995P/FP	8-Bit Serial-Input Latched Driver	Bi-CMOS	5	2.5*	30	50	16P4/16P2N	
M56620AP	8-Bit Parallel-Input Latched Driver	Bi-CMOS	5	1.0*	50	350	22P4	

\* : Output 1 = ON

- Short circuit protection drivers

Type No.	Function	Typical electrical characteristics			Package outline	Remarks
		Supply voltage (V)	Output with-stand voltage (V)	Output current (A)		
M54630P	8-Unit 200mA Source Driver	30	30	-0.2	18P4	