

3-3 LCD Controller-drivers and Drivers

LCD controller-drivers for small-sized displays

Built-in character generators together with segment and common drivers simplify the task of displaying microprocessor messages on small LCDs.

SED1200 series

Part number	Supply voltage range (V)	LCD voltage range (V)	Duty	Segment	Common	Display RAM (characters)	Microprocessor interface	Extension display output	Package	Comment					
SED1200D0A	2.5-5.5	3.5-5.5	1/8, 1/16	50	16	20	4-bit parallel	-	AI pad chip	JIS character					
SED1200D0B									ASCII character						
SED1200F0A									JIS character						
SED1200F0B									ASCII character						
SED1200F1B				QFP14-80pin											
SED1210D0A				QFP5-80pin			JIS character								
SED1210D0B				AI pad chip			ASCII character								
SED1210F0A				JIS character											
SED1210F0B	ASCII character														
SED1220D	2.4-3.6	4.0-7.0	1/26	64	26	40	4 or 8-bit parallel or Serial	-	Au bump chip	Built-in power circuit for LCD					
SED1220T			1/18		20				TCP	Three standard characters (JIS, ASCII, Cellular)					
SED1221D				60					26	Au bump chip	LCD static drive allowed				
SED1221T					TCP										
SED122AD*				1.8-3.6	4.0-6.0				1/18, 1/26	60	26	4 or 8-bit parallel or Serial	-	Au bump chip	
SED1222D			TCP												
SED1230D	*2.4-3.6	4.0-12.0	1/30	65	30	48	4 or 8-bit parallel or Serial	-	Au bump chip	Built-in power circuit for LCD					
SED1230T			1/23		23				TCP	Three standard characters (JIS, ASCII, Cellular)					
SED1231D				16					30	Au bump chip	SED1230/31/32/33				
SED1231T					TCP					LCD static drive allowed					
SED1232D				1/16	80				16	Au bump chip					
SED1232T			TCP												
SED1233D			1/30	62	16				Au bump chip	SED1234/35					
SED1233T									TCP	LCD dynamic drive only.					
SED1234D			1.8-3.6	4.0-10.0	1/18, 1/34				64	34	54	4 or 8-bit parallel or Serial	-	AI pad chip	
SED1235D														TCP	Line blink
SED1240D*	4.5-5.5	3.0-5.5	1/8, 1/11, 1/16	40	16	80	4 or 8-bit parallel or Serial	Serial	AI pad chip	Six standard characters (0A/0B/0C/0E/0G/0H)					
SED1240T*									QFP5-80pin						
SED1278D									QFP5-100pin	Three standard character (0A/0B/0C)					
SED1278F															
SED1280F															

* : Under development

SED1100 Series and Extension drivers for the SED1210 and SED1278

• Segment drivers

Part number	Supply voltage range (V)	LCD voltage range (V)	Duty	segment output	Microprocessor interface	Package	Remarks
SED1180F0A	4.5~5.5	14~25	1/64~1/128	64	4-bit parallel	QFP1-80pin	For combination with the SED1190 in pairs.
SED1180F5A						QFP5-80pin	
SED1180D0A	4.5~5.5	14~25	1/64~1/128	64	4-bit parallel	AI pad chip	For combination with the SED1190 in pairs.
SED1181F0A	4.5~5.5	14~25	1/64~1/128	64	Serial	QFP1-80pin	For combination with the SED1191 in pairs.
SED1181F5A						QFP5-80pin	
SED1181DLA	2.4~6.0	2.5~12	1/1~1/32	64	Serial	AI pad chip	Expansion driver for the SED1210 and SED1278
SED1181FLA	2.4~6.0	2.5~12	1/1~1/32	64	Serial	QFP5-80pin	Expansion driver for the SED1210 and SED1278
SED1681D0A	2.4~6.0	3.0~12	1/8~1/32	80	Serial	AI pad chip	Expansion driver for the SED1278
SED1681F0A	2.4~6.0	3.0~12	1/8~1/32	80	Serial	QFP5-100pin	Expansion driver for the SED1278

• Common drivers

Part number	Supply voltage range (V)	LCD voltage range (V)	Duty	Common output	Microprocessor interface	Package	Remarks
SED1190D0A	4.5~5.5	14~25	1/64~1/128	64	Serial	AI pad chip	For combination with the SED1180 in pairs.
SED1190F0A	4.5~5.5	14~25	1/64~1/128	64	Serial	QFP1-80pin	For combination with the SED1180 in pairs.
SED1190F5A						QFP5-80pin	
SED1191F0B	4.5~5.5	14~25	1/64~1/128	64	Serial	QFP1-80pin	For combination with the SED1181 in pairs.
SED1191F5B						QFP5-80pin	