

● Color Part Numbering System

$\frac{P}{1}$ $\frac{H}{2}$ $\frac{128160}{3}$ $\frac{A}{4}$ - $\frac{001}{5}$ - $\frac{H}{6}$ - $\frac{P1}{7}$

NO.	Code	Description	Remark	
1	P	Powertip products	Brand	
	S	Engineer sample		
2	H	Color product	LCD module type	
3	128160,...	LCD Panel Display Type		
		Main Display	Sub Display	
4	A	CSTN	MONO	Display Composing Type
	B	CSTN	CSTN	
	C	CSTN	-	
	D	CSTN	OLED	
	E	TFT	MONO	
	F	TFT	TFT	
	G	TFT	CSTN	
	H	TFT	OLED	
	T	TFT	-	
K	Others	Others		
5	001~999	Series number	Display Viewing Features	
6	A~Z	Refer to display viewing features system Table B below	Table B	
7	None	Standard product("Q"=ROHS compliant)	Version	
	01~ZZ	Special code		

Display Viewing Features System (Table B)

Operation Temperature		Normal Temp.(NT):0°~50°C		Wide Temp.(WT):-20°~70°C	
Viewing direction		6:00	12:00	6:00	12:00
Polarizer	Reflective	A	D	G	J
	Transflective	B	E	H	K
	Transmissive	C	F	I	L

LCD CAPABILITY

Description		TN	HTN	STN	FSTN	Unit
Max. outline		370x400	370x200	370x400	370x400	mm
Glass thickness		0.4, 0.55, 0.7, 1.1				mm
Color	Positive image	Foreground	Black	Black	Navy	Black
		Background	Silver Gray	Silver Gray	Gray	White
	Negative image	Foreground	White	White	White	White
		Background	Black	Black	Navy Blue	Black
Dot size		0.5	0.5	0.2	0.2	mm
Dot gap		0.05	0.05	0.01	0.01	mm
Pin pitch	With metal pin	1.27, 1.5, 1.8, 2.0, 2.54mm and the edge width ≥ 0.5mm				mm
	W/heat seal or others	≥ 0.4mm	≥ 0.4mm	≥ 0.15mm	≥ 0.15mm	mm
Operating temperature		Normal range: 0~50		Extend range: -20~70		°C
Storage temperature		Normal range: -20~60		Extend range: -30~80		°C
Refresh		Static~1/16	1/8~1/32	1/16~1/320	1/16~1/320	Duty

● Mono COG Part Numbering System

$\frac{P}{1} \quad \frac{E}{2} \quad \frac{16}{3} \quad \frac{02}{4} \quad \frac{*}{5} \quad \frac{*}{6} \quad \frac{*}{7} \quad - \quad \frac{***}{8} \quad - \quad \frac{*}{9} \quad - \quad \frac{*}{10}$

NO.	Code value	Description	Remark
1	P	Powertip products	Brand
	S	Engineer sample	
2	E	COG LCM	Module type
3	08.16.20.24...	Character per line(for character modules)	Characters per line or row dots
	120.122.128...	Row dots(for graphic modules)	
4	01.02.03.04...	Lines(for character modules)	Lines or column dots
	32...240...	Column dots(for graphic modules)	
5	A	Without backlight	Backlight mode (Type+Color)(*1)
	B	EL backlight Blue-green	
	D	EL backlight Yellow-green	
	E	EL backlight White	
	F	CCFL backlight White	
	L	LED backlight Yellow-green	
	M	LED backlight Amber	
	N	LED backlight Red	
	O	LED backlight Orange	
	P	LED backlight Pure-green	
	S	LED backlight Green	
	T	Double LED backlight	
	U	LED backlight Blue	
	V	LED backlight Blue white	
W	LED backlight White		
R	Triple LED backlight		
6	R	Standard(Through hole, cable, connector and etc.)	Connecting type
	Y	Straight pin-header	
	Z	Right angle pin-header	
7	None(*2)	TN positive gray	LCD Mode (Type+Color)
	N	TN negative blue	
	H	HTN Positive Gray	
	S	STN positive gray	
	U	STN Positive yellow-green	
	M	STN negative blue	
	F	FSTN positive white	
T	FSTN negative black		
8	000~ZZZ	Series number	Model name
9	A~Z	Refer to display viewing feature system Table B below	Table B
10	No Code value	Standard product("Q"=ROHS compliant)	Version
	01~ZZ	Special code	

Table B

Operation Temperature		Normal Temp.(NT):0°~50°C		Wide Temp.(WT):-20°~70°C	
Viewing direction		6:00	12:00	6:00	12:00
Polarizer	、 Reflective	A	D	G	J
	Transflective	B	E	H	K
	Transmissive	C	F	I	L

Remark: (*1).Please contact with sales to check if code combinations are available.
 (*2).Without code value

● Mono Part Numbering System

P C 16 02 * * * - * ** - * - *
 1 2 3 4 5 6 7 - 8 9 - 10 - 11

NO.	Code value	Description	Remark
1	P	Powertip products	Brand
	S	Engineer sample	
2	C	Character type	Module type
	G	Graphic type	
3	08.16.20.24...	Character per line(for character modules)	Character per line or row dots
	120.122.128...	Row dots(for graphic modules)	
4	01.02.03.04...	Lines(for character modules)	Lines or column dots
	32...240...	Column dots(for graphic modules)	
5	A	Without backlight	Backlight mode (Type+Color)(*1)
	B	EL backlight Blue-green	
	D	EL backlight Yellow-green	
	E	EL backlight White	
	F	CCFL backlight White	
	L	LED backlight Yellow-green	
	M	LED backlight Amber	
	N	LED backlight Red	
	O	LED backlight Orange	
	P	LED backlight Pure-green	
	S	LED backlight Green	
	T	Double LED backlight	
	U	LED backlight Blue	
	V	LED backlight Blue white	
6	R	Standard(Through hole, cable, connector and etc.)	Connecting type
	Y	Straight pin-header	
	Z	Right angle pin-header	
7	None (*2)	TN positive gray	LCD Mode (Type+Color)
	N	TN negative blue	
	H	HTN Positive Gray	
	S	STN positive gray	
	U	STN Positive yellow-green	
	M	STN negative blue	
	F	FSTN positive white	
	T	FSTN negative black	
8	0~Z	Series number	Model name
9	00~ZZ	Reference to IC manufacturer/character pattern/total solution series number system Table A below	Table A
	NN	Without controller	
10	A~Z	Refer to display viewing feature.system Table B below	Table B
11	NO Code value	Standard product("Q"=ROHS compliant)	Version
	01~ZZ	Special code	

Table A

S*	SUMSUNG LSI	T*	TOSHIBA LSI	Y*	SANYO LSI	M*	MOTOROLA LSI
E*	EPSON LSI	H*	HITACHI LSI	N*	NOVATEK	W*	SITRONIX LSI
A*	APANPEC LSI	R*	SHARP LSI	P*	PHILIPS LSI	J*	JRC LSI
B*	RAIO	C*	ASLIC	F*	TOMATO LSI	G*	AVANT
L*	SUNPLUS LSI	O*	OKI LSI	U*	UMC GROUP LSI	Z*	HOTEK LSI

Table B

Operation Temperature		Normal Temp.(NT):0~50°C		Wide Temp.(WT):-20~70°C	
Viewing direction		6:00	12:00	6:00	12:00
Polarizer	Reflective	A	D	G	J
	Transflective	B	E	H	K
	Transmissive	C	F	I	L

Remark: (*1).Please contact with sales to check if code combinations are available.
 (*2).Without code value