

Dear Partners:

Merry Christmas and Happy New Year! Thank you very much for your continuous support in year 2014, we look forward to work with you for a prosperous year 2015! Please check below update News Release.

- Chinese New Year will start from Feb. 18~23, 2015. In concern of possible manpower shortage in both Powertip and material suppliers, we suggest you to review customer demand and place order asap for March ~April shipment.
- Thank you for visiting Powertip Munich booth.



Below brief product summary. Detail please refer to company brochure, website or mail to Powertip sales contact window.

- 1) TFT Solution (7", 8", 10.1", 10.4", 12.1" inch)
 - Various brightness (300,500,800cd/m2)
 - Resistive & Capacitive Touch Panel
 - Wide viewing angle (IPS like)
 - Projective Touch panel with 3mm cover lense
- 2) Embedded Solution
 - CPU: RA8875+C8051, Cortex M3, ARM926
 - OS : WINCE, Android, Linux
 - Embedded board with different size of TFT module

3) LCD Solution

- One Glass Solution (OGS) for Capacitive Touch Panel
- Inner Touch Solution for mono icon display
- High contrast FSTN(PE240128)
- Vertical Alignment (V/A) 1/32 duty
- 1602 V/A with different B/L color (OLED like), part no.: NPC1602WRP-FWA-I(white) , Red, Blue, Y/G are also available

● Comparison chart—FSTN vs OLED like (PBT) vs OLED

Item	FSTN	OLED Like(PBT)	OLED
View Angle	80 degree	90 degree	175 degree
Vision impression	Soft	Soft	harsh <u>light</u>
Contrast Ratio	20:1	400:1	800:1
Backlight	LED	LED	-
Color	W/YG/B/R	W/YG/B/R	W/YG/B/R
Lifetime	40K~50K(White/Blue)/ 100K(YG/Red)	40K~50K(White/Blue)/ 100K(YG/Red)	10K~50K
Operation Temp	-20~70°C	-20~70°C	-40~85°C
Power Consumption (white color)	40 mA	40mA	50mA
Tooling	normal	normal	high

● IPS Like

- The contrast of Chi-Mei film is with better dynamic image in comparison with Optimax
- Film cost of Chi-Mei is around 3 times comparing to Optimax film.
- IPS like is only available for size below 7”.

IPS Like	Optimax o-film	Chi-Mei o-film
Without CTP	PH480272T-006-I17Q	PH480272T006-IBD
With CTP	PH480272T006-IBF	PH480272T006-IBF01

- **TFT New product**

- 1) 5" TFT option is as below.

- WVGA PH800480T018-IZA01 (W/O TP)
 - WVGA PH800480T018-IZB01 (With RTP)
 - WQVGA 480*272(PH480272T008-IAA01) is available currently. Panel long term availability needs to be checked in future.

- 2) 7" TFT (800cd/m2) .

- Model no.: PH800480T013-ICA
 - B/L current: 160mA
 - B/L voltage: Min/Typ/Max,9.0/9.5/10.2 V

- 3) 7" TFT 500cd/m2 with low profile as below model and thickness.

- PH800480T013-IBA01: 3.4mm (This model replaces PH800480T013-IBA:5.8mm)
 - PH800480T013-IBB01:4.9mm
 - PH800480T013-IBC01:5.6mm

- 4) 10.4" TFT model

- PH102768T002-ZZA(W/O TP)
 - PH102768T002-ZZB (With RTP)

- 4) 7"/8"/10.1"/12.1" with CTP

- 7" with CTP =PH102600T002-IBC (I2C interface)
=PH102600T002-IBC01 (USB interface)
 - 8" with CTP =PH102600T004-IBC (I2C interface)
 - 10.1" with CTP= PH102600T003-IBC01(USB interface)

- 6) 10.1"/10.4"/12.1" roadmap

- With AD board will be available in Feb.
 - With higher brightness 1000cd/m2 will be available in March.
 - 12.1" PH102768T001-ZAA with CTP is under developing

- **Embedded solution**

- Please check the updated price list issued on Dec. 18,2014.