



# POWERTIP

Presented by Steven Lin

Sales Department

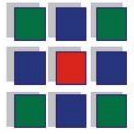
September, 2007



Response	Percentage
Yes, the current system is the best way to run the country	85%
No, the current system is not the best way to run the country	15%

- TFT & OLED Products
  - QVGA Negative FSTN LCD
  - IC Phase Out Issue
  - Technical Discussion
- Note: Please write down all of your questions and they will be answered during Q&A portion

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*TFT & OLED Products*

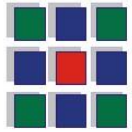
## TFT Push Products

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- Powertip receives the TFT Mother Glass from CMO.
- Mother Glass goes through LCD cutting process.
- All Back-end process then follows for the TFT LCD.
- B/L, Frame and PCB assembly completes the TFT LCM.

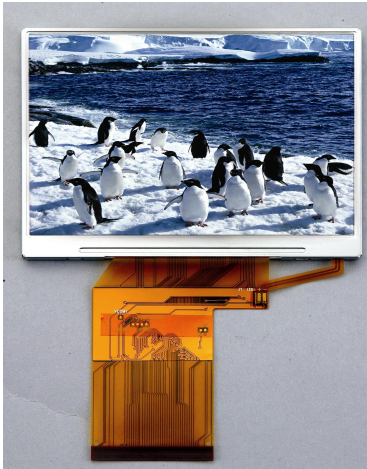


Size	Part #	Status	Remarks
3.5" Digital	PH320240T-006-I-Q PH320240T-006-IP1Q	Mass Production Mass Production	Single Chip IC Single Chip IC w/ T/P
4.3" Digital	PH480272T-001-IA0Q PH480272T-001-I-Q	Mass Production Mass Production	With Touch Panel
5.7" Digital QVGA	PH320240T-009-I-Q Mechanical compatible PG320240-M	Mass Production	Positive Vcom T/P Available
5.7" Digital QVGA	PH320240T-009-IC1Q Mechanical compatible to Kyocera	Mass Production	Positive Vcom T/P Available
7.0" WVGA	Part Number will be available soon	Sample Available	T/P Available

Note: 3.5" Single Chip IC is the trend for the future, for new projects please do promote the Single Chip IC solution to your customers.



### 3.5" TFT LCM



## .5” Dual Chip

vs.

## 3.5" Single Chip





- Advantage of using 3.5” Single Chip IC Solution
  - Vcom, Vgh, Vgl, POL circuit built in for Single Chip IC.
  - Single Power Input
  - Customer can save \$\$\$\$ on Power Circuit
- Software Initialization
  - Initialization code should be provided – see application notes.
- Outline
  - The same mechanical outline and pin assignment.



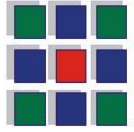
### 4.3" TFT LCM



## 4.3'' Digital TFT







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## *TFT 4.3" Version*

- High brightness with 300 cd/m2.
- Touch Panel available.
- Automotive specification available with Top -30~85 Deg C.
- Suitable for GPS application.

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## 5.7” Positive Vcom

## 5.7" Negative Vcom





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- Note: The above goes the same for PH320240T-005-I-Q (PG320240-M version)



## *TFT 5.7" Version*

## Display Outcome

# PH320240T-005 Series

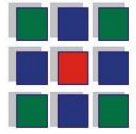


## Negative Vcom

PH320240T-009 Series



## Positive Vcom



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*7.0" TFT LCM*



7.0" Digital TFT

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- ODF TFT from CMO.
- Automotive specification available, Top -30~85 Deg C
- White LED version only
- Touch Panel available.
- High brightness with 350 cd/m2
- Mechanical and Pin out the same with CPT's 7.0" TFT
- Tcon and LED B/L driving circuit built in



## *TFT & OLED Products*

# OLED Push Products





## ***OLED Products***

Note: Powertip will only promote AM OLED





- Powertip has developed a brand new FSTN Negative LCD which comes with a darker black background.
- The new QVGA FSTN Negative LCD can be compared with Nanya product.
- Higher Contrast Ratio.



# Mono Controller & Driver IC Phase out



Response	Percentage
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- | Part #  | PTC LCM   | Part #  | PTC Code        |
|---------|-----------|---------|-----------------|
| S6A0069 | PC LCM    | S6B0724 | Custom Design   |
| S6B0107 | PG12864-K | S6B0713 | Custom Design   |
| S6B0108 | PG12864-K | S6B0086 | Graphics Driver |

- | Samsung      | Alternative  | Samsung | Alternative |
|--------------|--------------|---------|-------------|
| S6A0069 (SO) | ST7066U (WA) | S6B0724 | ST7565      |
| S6B0107 (NN) | NT7107 (CN)  | S6B0713 | ST7565      |
| S6B0108 (NN) | NT7108 (CN)  | S6B0086 | NT7086      |

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*Sunplus*

- Powertip doesn't use much of Sunplus monochrome Controller and Driver ICs.
- The only LCM that will be affected are Character LCMs which use LA, LK and LC as its controller IC.
- Stop production will be on Dec. 31, 2007
- Powertip suggests to use ST7066U as alternative IC.
- Please do place sample LCM if your end customer needs to do some testing.





Rex, a specialist of LCM products, will be available to answer your technical questions concerning TFT and OLED



# *The End*

Thank you very much for your attention