

NEC LCD Technologies Enhances Lineup of TFT Color LCDs for Industrial Use

DUESSELDORF, Germany, TOKYO, Japan, March 31, 2005 — NEC LCD Technologies, Ltd. today announced that it will mass produce two kinds of 10.4-inch (26cm-diagonal) and 6.5-inch (17cm-diagonal) amorphous silicon thin-film-transistor liquid crystal displays ("TFT LCDs") to meet the various demands of the industrial sector. The main characteristics of these new models are outlined below.

(1) 10.4-inch SVGA "NL8060BC26-27"

- Significant improvement in visibility: By adopting NEC LCD Technologies' own unique SA-SFT technology (*Note 1), which boasts improved panel transmissivity and high display properties, a significant improvement in visibility as compared with the predecessor product "NL8060BC 26-17" is achieved. This realizes the following:

(A) An ultra-wide viewing angle of 170 degrees (contrast ratio greater than 10:1) in comparison to the conventional 100-degree horizontal and 80-degree vertical viewing angle of its predecessor product.

(B) A reduction of the color and/or contrast shift problem that occurs due to a change in viewing angle.

(C) High luminance of 400cd/m² (compared with the conventional 280cd/m²), and high contrast of 700:1 (compared with the conventional 300:1).

This allows quick, precise and stress-free reading of on-screen information in multiple use environments while also enabling a decrease in installation location restrictions.

- Wide operating-temperature range: Use of the new product is enabled even under severe environments, where the LCD may be susceptible to high temperatures and various temperature changes, due to expansion of the operating-temperature range from 0 degrees Celsius to +50 degree Celsius to -10 degrees Celsius to +70 degrees Celsius.

- Compatibility: The new product is compatible with its predecessor product "NL8060BC 26-17" in relation to outer dimensions, position of mounting holes, and screen center. Furthermore, it can be replaced easily without the need to change any of the peripheral appliances due to interface compatibility.

NEC LCD Technologies Enhances Lineup of TFT Color LCDs for Industrial Use

(2) 6.5-inch VGA“NL6448BC20-18D”

- Significant improvement in visibility: The new product realizes significant improvements in visibility as compared with its predecessor product "NL6448BC20-08E" including the following:

(1) A wide viewing angle of 160 degrees horizontally and 140 degrees vertically (contrast ratio greater than 10:1) as compared with the conventional viewing angle of 100 degrees horizontally and 80 degrees vertically.

2) High luminance of 400cd/m² (as compared with the conventional 300cd/m²).

3) High contrast of 600:1 (as compared with the conventional 250:1).

This allows quick, precise and stress-free reading of on-screen information in multiple use environments while also enabling a decrease in installation location restrictions.

- Wide operating-temperature range: Use of the new product is enabled even under severe environments, where the LCD may be susceptible to high temperatures and various temperature changes, due to expansion of the operating-temperature range from 0 degrees Celsius to +50 degree Celsius to -10 degrees Celsius to +70 degrees Celsius.

- Compact: The compact design and the revision of the mounting method realize a narrower frame, cutting the frame size in half on all sides. In addition, the area required for installation of the LCD is reduced by approximately 20%. Furthermore, the new design boasts a 15% reduction in weight (240g decreased to 205g) and a 12% reduction in power consumption (5.0W decreased to 4.4W.)

Screens boasting high levels of visibility that enable clear display of various information that facilitate easy reading are highly sought after in the industrial market. Recently, these kinds of needs have been increasing due to the diversity of installation locations and environments where appliances are used. "Responding to the demands of the industrial sector, our aim is to improve usability and create new products that answer the many needs of the sector, such as LCDs that are suitable for environments susceptible to severe temperature fluctuations etc." said Hidetoshi Usui, department manager in charge of product planning and marketing, NEC LCD Technologies, Ltd.

NEC LCD Technologies, Ltd. takes into account the special needs of the industrial market in creating products through its own unique technology and know-how that it has cultivated over many years. It will continue to further strengthen its product lineup aiming at exploitation of new fields and markets.

****Note 1: Super-Advanced, Super-Fine TFT technology.***

****Please see the attached sheet for the main specifications of the new models.***

NEC Electronics Europe Announces Three New LCDs for Medical Display Applications

3/3/3

About NEC Electronics (Europe) GmbH

NEC Electronics (Europe) GmbH, headquartered in Duesseldorf, Germany, is a leading developer, manufacturer and supplier of semiconductor products in Europe. Committed to meeting customers' cost, performance and time-to-market requirements, the company offers solutions ranging from standard products to system-on-a-chip (SoC) solutions, as well as customized products for next-generation designs. NEC Electronics also offers customers the benefit of state-of-the-art manufacturing locally in Europe, besides the global production of its parent company, NEC Electronics Corporation. Additionally, NEC Electronics (Europe) GmbH is the exclusive European sales and marketing channel of LCD modules from NEC LCD Technologies Ltd.. For more information visit <http://www.ee.nec.de>.

About NEC LCD Technologies, Ltd.

NEC LCD Technologies, Ltd. is one of the world's leading providers of high-quality, innovative, active-matrix liquid crystal display (AM-LCDs) modules for the industrial and high-end monitor markets. The company focuses its development on three core technology areas: ultra-wide viewing angle SFT technology, with high luminance and fast response; transfective NLT technology; and adaptive design technology that meet a variety of specialized needs for the flat panel display markets. NEC LCD Technologies' worldwide support includes sales and marketing affiliates NEC Electronics America, Inc. (www.necelam.com) and NEC Electronics Europe (www.ee.nec.de) that offer specialized display solutions to their respective markets. NEC LCD Technologies employs approximately 1,200 people worldwide and offers one of the broadest product portfolios for the medical, factory automation, test and measurement, entertainment, kiosk, POS and ATM markets. Additional information can be found at <http://www.nec-lcd.com/english/>

Media Contact

Oliver Lüttgen
NEC Electronics (Europe) GmbH
+ 49-211-6503-1469
luettgeno@ee.nec.de

NEC LCD Technologies Enhances Lineup of TFT Color LCDs for Industrial Use

Main Specifications

Part number:	NL8060BC26-27
Drive system	Amorphous silicon TFT active matrix
Display area:	211.2mm x 158.4 mm Diagonal screen size of 10.4-inches (26.0cm)
Pixel:	800(H) x 600(V) pixels
Pixel arrangement:	RGB vertical stripe
Pixel pitch:	0.264(H) x 0.264(V) mm
Display color :	262,144 colors
Luminance:	400cd/m ² (typ.)
Contrast ratio:	700:1 (typ.)
Viewing angle:	Horizontal : Right and left sides 170 degrees TYP. Vertical : Up and down sides 170 degrees TYP. (contrast ratio at over 10:1)
Response time :	50ms (typ.) (Ton + Toff: From 10% to 90%)
Interface:	CMOS RGB (6 bits each)
Operating temperature:	-10 degrees C to +70 degrees C
Storage temperature:	-20 degrees C to +80 degrees C
Module size:	243.0mm (typ.) x 185.1mm (typ.) x 11.0mm (max.)
Weight:	457g (typ.)
Recommended inverter:	104PW161
Power consumption:	6.6W (typ.) (Power dissipation of the inverter is not included.)

Part number:	NL6448BC20-18D
Drive system	Amorphous silicon TFT active matrix
Display area:	132.48mm x 99.36 mm Diagonal screen size of 6.5-inches (17.0cm)
Pixel:	640(H) x 480(V) pixels
Pixel arrangement:	RGB vertical stripe
Pixel pitch:	0.207(H) x 0.207(V) mm
Display color :	262,144 colors
Luminance:	400cd/m ² (typ.)
Contrast ratio:	600:1 (typ.)
Viewing angle:	Horizontal : Right and left sides 160 degrees TYP. Vertical : Up and down sides 140 degrees TYP. (contrast ratio at over 10:1)
Response time :	25ms (typ.) (Ton + Toff: From 10% to 90%)
Interface:	CMOS RGB (6 bits each)
Operating temperature:	-10 degrees C to +70 degrees C
Storage temperature:	-20 degrees C to +80 degrees C
Module size:	153.0mm (typ.) x 118.0mm (typ.) x 11.0mm (max.)
Weight:	205g (typ.)
Recommended inverter:	65PW061
Power consumption:	4.4W (typ.) (Power dissipation of the inverter is not included.)

** Please note that the press releases and other information in this file may be out of date when observed. Please refer to other portions of our website for more current information concerning NEC LCD Technologies, Ltd. and its current business activities.*