

## NEC LCD Technologies, Ltd.

“Together with our customers, we will create New Solutions for New and Emerging Markets.” With these words as its management concept, NEC LCD Technologies is streamlining innovation and maximizing the speed and flexibility of its response to the increasingly diverse and sophisticated customer needs. The integration of manufacturing and marketing, achieved with the merger of the LCD manufacturing subsidiaries NEC Akita, Ltd. and NEC Kagoshima, Ltd. with the parent company NEC LCD Technologies, Ltd. has created both business and management efficiencies that promise more advanced display solutions and even greater customer satisfaction.

### Business Concept

By focusing on the industrial LCD market as its core business, NEC LCD Technologies, Ltd. aims to provide LCD module products that are designed, engineered and manufactured with the customer perspective in mind and embody the pursuit of “more beautiful and brighter anytime, anywhere” in display technology.

### Edge in NEC Display Technology (Four Core Technologies)

#### (1) SFT (Super Fine TFT) Technology

NEC LCD Technologies’ proprietary SFT panel design technology yields a brighter, clearer, higher quality image on LCDs along with wider viewing angle. Through this evolving technology, the company is pursuing further advances in wide viewing angle, high luminance, quick response times and wider color gamut while reducing color shift.

#### (2) NLT (Natural Light TFT) Technology

For bright comfortable viewing of anytime, anywhere and under all lighting conditions, NEC LCD Technologies offers two types of NLT technology. 1) ST-NLT minimizes surface reflection of ambient light while boosting the performance of a high-luminance backlight for clear and vivid color. 2) SR-NLT is available with two modes: Reflective Mode which uses ambient light as a display light source for improved energy efficiency, and Transmissive Mode which uses the backlight as a light source not only under weak light conditions such as nighttime or indoor conditions but also under high ambient light for optimum visibility and minimized surface reflection.

#### (3) VIT (Value Integrated TFT) Technology

By using low-temperature polysilicon technology and integrating various peripheral circuits on the LCD glass substrate, this innovative technology makes it possible to create LCDs that deliver higher performance with enhanced multi-functionality.

#### (4) Adaptive Design Technology

This domain of technology seeks levels of image quality

and usability that will satisfy the increasingly diverse needs of various customer applications. For example, while addressing demand for wider operating temperatures, interface compatibility and design requirements, NEC LCD Technologies is seeking innovation in adaptive design technology to facilitate long-term support critical to the requirements of industrial customers.

By leveraging the above four core technologies (see Fig.), NEC LCD Technologies is currently supplying the LCD needs of over 1,000 corporate customers.

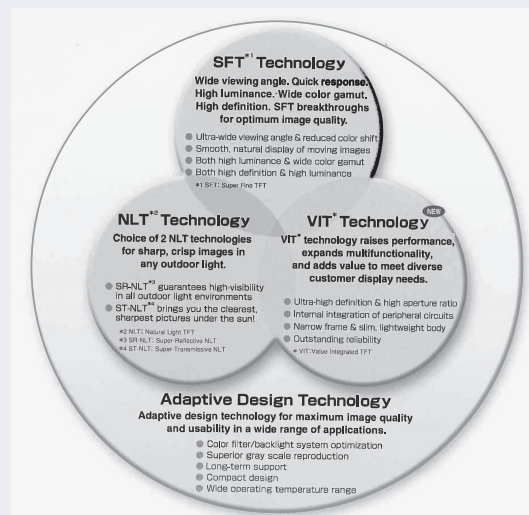


Fig. Four Core Technologies

### Technology Strategies

#### (1) Toward Higher Image Quality

High image quality can be defined in terms of high contrast exceeding 1000:1 and quick response times on par with CRT performance. From the perspective of specific industries, superior image quality can mean reduction of variance in brightness and color. Products that have realized high image quality such as monochrome models for medical applications, high-definition color monitors and monitors for usage in the broadcasting industry mainly rely on SFT technology and will evolve further in the fu-

ture, raising expectations for image quality.

**(2) Toward Enhanced Durability & Reliability**

In defining “durability and reliability”, NEC LCD Technologies includes performance benchmarks such as assured operation at temperatures of -20°C and lower, service life (mainly backlight life) exceeding tens of thousands of hours, and improvement of visibility in outdoor conditions. Also slimmer and lighter weight designs and wider color gamut achieved with the adoption of LED backlighting fall within the scope of this technology strategy. Applying the four core technologies, the high durability/high reliability products of NEC LCD Technologies are reaching for higher stages in the evolution of LCD displays inspired by its slogan, “The Clear Global Leader in the Industrial LCD Market.”

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