

### BLUE COLOR SEVEN SEGMENT DISPLAYS

June 2004, Hyderabad-based Kwality Photonics Pvt Ltd has introduced blue color 7 segment display light emitting diodes (LED) with better aesthetics and low electricity consumption. While normal LEDs consume about 20 mA of electricity, blue LEDs consume only ten per cent. Developing blue LED with indium gallium nitrate brings down the cost of manufacturing white LED, said **K Vijay Kumar Gupta**, managing director, Kwality Photonics, talking to Search Magazine. Normally, the color white is obtained by combining blue, green and red colors. When indium gallium nitrate is coated with yellow phosphor, white color is obtained. Gupta said that this technology would reduce manufacturing costs by 60 per cent. However, the current trend is to grow indium gallium nitrate and the material emitting yellow light so that it is easy to develop white LED. Since there are very few companies that develop the color white based on the color blue, Kwality hopes to get good business. At present, it is exporting blue LED to a couple of countries in Europe as well as the United States. In order to expand its overseas market, the company has appointed an agent in Germany to handle the European Union. The company is also participating in Electronica 2004 in November this year. It is also working towards enhancing efficiency, reducing costs, and increasing the number of LED in a single cluster. It also aims at improving lead frames and housing for LED where higher amounts of heat can be dissipated, thus permitting more electricity to be pumped into extracting more light from a single LED. Gupta said that once this project is through, his company hopes to foray into the automotive segment.

Over a period of time, Kwality has gained expertise in customisation of LED clusters. It offers a combination of voltage, power, shape, and beam characteristics. As a backward integration approach, Kwality is also working on indium gallium nitrate to optimise efficiency. Kwality Electricals, an associate company of Kwality Photonics, is in talks with Siemens VDO and Pricol to supply cap-less lamps for instrument clusters. Samples have been already been supplied and endurance tests are presently being conducted. The company hopes to begin commercial supplies before the end of the first quarter of this fiscal.



