



Flexible Printed Electronic

www.centralmidori.com

Reliable, Secure, Robust and Precise

Founded in Singapore in 1988 with the transfer of technology from Japan, CMI is recognized in South East Asia for his expertise in flexible printed electronic.

Our main products include membrane switch, graphic overlay, sensor and security foil. We have enjoyed a steady growth by expanding our position into electronic market segments like Industrial, Instrumentation, Banking and Medical.

Our mission is to enable our customers to make their products better, cheaper and faster through our core technology expertise, process efficiency and a nimble organization.

We focus on customers who require continuous assistance from design through manufacturing.

CMI is a subsidiary of Demmel Gruppe with locations in Germany, Switzerland and China.

PRINTING



With more than 25 years of experience in precision screen printing, Central Midori has continuously improved its printing techniques to achieve smaller features on thinner material with high speed and accuracy.

We process our stencils internally using liquid emulsion or capillary film. Our most common mesh is made of monofilament polyester but we also use stainless steel for certain applications. Mesh count can vary from 100 to 420 thread per in.

CMI was a pioneer in the development of through-hole printing in the early 1990's. All of our printing processes take place in clean rooms with temperature and humidity control.



COLOR MIXING

At Central Midori we know how important colors are for our customers. They represent your brand and stimulate the senses -- instantly conveying a message like no other communication method. Colors mean different things depending on your culture, geographical location or personal background. We take color mixing seriously. You would be surprised by how long it takes us to reach the perfect color mix.



Halfway between a science and an art, mixing colors relies on long term experience. We are also using one

of the most sophisticated high precision spectrophotometry to fine tune the formulation with a ΔE of 1.

CMI has also developed an expertise in texture and surface pattern.

Medical



Instrumentation



Industrial



Banking



Dependable Manufacturing in the Heart of Singapore



DEMMEL AG

Grüntenweg 14 D-88175 Scheidegg

Tel +49 (8381) 919-0 Fax: +49 (8381) 919-191

E-Mail: info@demmel.de Web: www.demmel.de

ASSEMBLY







CMI DEMMEL GRUPPE Central-Midori (Int'l) Pte Ltd

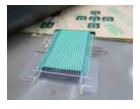
2 Tukang Innovation Grove 06-02 Singapore 618305

Tel: +65 6779 1113 Fax:+65 6779 3111

Email: customerservice@central-midori.com.sg Web: www.centralmidori.com

Many of our products are manufactured by laminating multiple layers of conductive and dielectric polymers together.

The lamination process guarantees the proper bonding and protect the final assembly from outside



contaminants such as cleaners, detergents and solvent and also from hostile conditions like high temperature, humidity and moisture.

Tactile domes are sandwiched between the circuit and the overlay layer. A spacer layer holds the domes in their positions. Domes come in various shapes (i.e. square, round, triangle and oblong). The material can be stainless steel or plated with gold or Nickel. Diameters vary from 6 to 20mm.

COMPONENT MOUNTING



Central Midori assembly process consists of integrating electronic components, such as passive components or LEDs into our products using conductive adhesive technology. Our production process is made up of six stations.



First is the dispensing of the chip bonding glue followed by the dispensing of a low temperature conductive epoxy adhesive. We use Juki high speed mounter to pick and place components at the rate of 19,300 per hour. Our adhesives are cured at low temperature (65°C) in a ventilated oven. For most of our applications a final component encapsulation is necessary to meet customer peel strength requirement.

The last operation consists of the curing of the encapsulant.



Sensor



Security Foil









Central-Midori (Int'l) Pte Ltd 2 Tukang Innovation Grove 06-02 Singapore 618305

> Tel: +65 6779 1113 Fax: +65 6779 3331

Email: customerservice@central-midori.com.sg