Holitech Europe GmbH

Tech Talk – Smart Home

TFT, Monochrome and ePaper Displays, Camera Modules and Touch Solutions for Smart Home Applications

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Make information happen.

Holitech Europe - Introduction

Holitech Europe GmbH

Klaus-Bungert-Straße 5a
40468 Düsseldorf
Germany

Office

Located in a new building, offering efficient working areas, modern architecture and excellent national and international traffic connections.

A Holitech Group Company

Displays, ePaper, CCM and other solutions for a high variety of applications.

Dedicated European support team

- Sales
- Marketing
- Technical Support

- Supply Chain
- Logistics
- Quality

Holitech Smart Home Applications

As a leading manufacturer and solution provider for the complete development of Human Interface products and applications, Holitech offers:

ePaper Displays   **TFT Displays**   **Touch Technologies**   **Camera Modules**   **Biometric Recognition Technologies**   **Monochrome Displays**

Monochrome Display Solutions

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- Positive (normally-white) and negative (normally-black) mode
- Reflective, transflective and transmissive
- Multicolor printing
- With or without backlight
- Wide-temp, automotive grade, Op: -30~85°C, St:-40~90°C
- Unusual shapes, round edges
- Glass size thickness: 1.1, 0.7, 0.55, 0.50 and 0.4mm

All Technologies

- TN
- HTN
- ETN
- STN
- FSTN

- DFSTN
- ESTN
- ASTN
- DSTN
- EBN

TFT Solutions

- Standard sizes 1.44" - 15.6"
- Designed by customer requirements (viewing angles, optical compensation, backlight, brightness interconnect, slimming etc.)
- 16:9/18:9 display screen with different resolution
- TN, VA, IPS, FFS , LTPS etc. technologies
- MIPI / USB / RGB interface

Complete LCD-Modules

- TFT
- Back Light
- Cover Glass
- Touch Panel
- Camera Module
- Fingerprint Module
- Housing
- FPC
- AG, AR, AF Treatment

Touch Solutions

single and multi-point touch, up to
40 touches

1 to 65" Diagonal
(up to 43" film sensors)

bonding to display
optical bonding using liquid glue
standard bonding with air gap using DST

bonding to cover lens
using liquid glue or film OCA

wide range of controllers
supported including
Atmel® maXTouch®
(Stand-alone sensors with or
without controller also available)
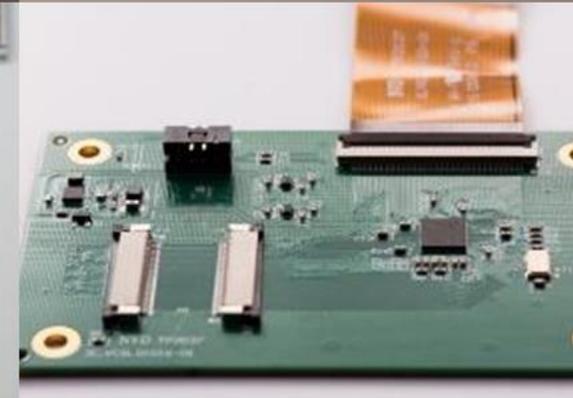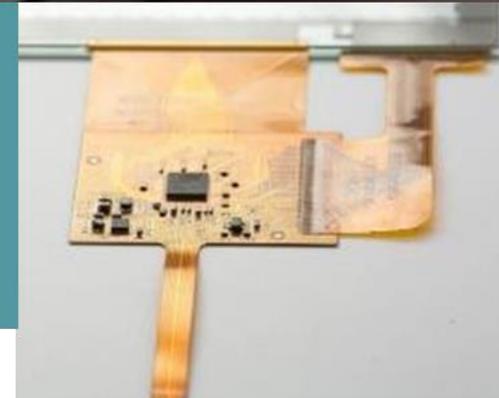
PET film and glass based substrates

SITO, DITO, OGS
single and dual-layer glass stacks,
single and dual-layer film stacks

MICROCHIP Atmel
CYPRESS FocalTech
ZINITIX GOODiX Sitronix

COB and COF designs

ePaper Displays – Smart Home

Strategic Partners
Strong cooperation between HT and E-INK in order to promote solutions for ESL, Smart Home, Intel. Retail, Intel. Storage & Intel. Logistics

| Advantages	Disadvantages
+ Sunlight viewing ability	− Slower response time
+ Low power consumption	− Slower switching speed
+ 180° viewing angle	− Narrow temperature range
+ Paper-like feeling	
+ Good for vision health	
+ Strong black-white-contrast ratio	

H-INK ePaper Display Solutions

- Dot-Matrix and Segmented ePaper Displays
- Most sizes are available in:
  - Black-White
  - Black-White-Yellow
  - Black-White-Red
- Low-temperature solutions available (below 0°C)
- No MOQs for standard displays
- Samples as well as demo boards available
- Short lead times
- Possibility of having grey scales for some sizes
- Possibility to add CTP starting from 10kpcs/year
- Possibility to offer products with front light (White or RGB)
- Huge production capacity (up to 5kk/month)
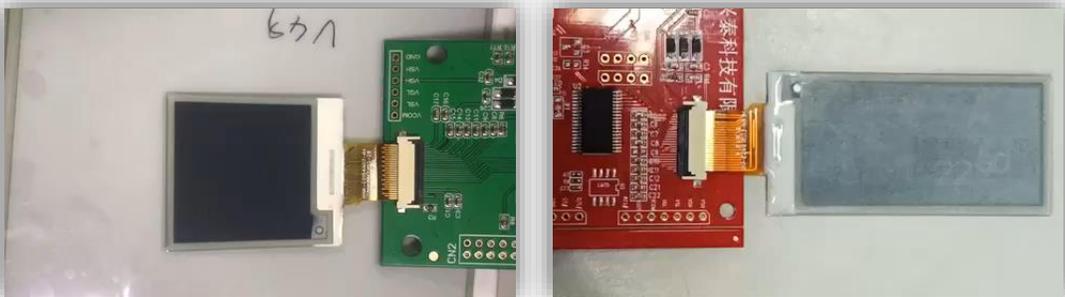
Dot-Matrix Displays

- Intended when many forms of text and images are required
- Displays comprise large array of pixels (controlled by TFT)
- Holitech offers a range of standard products for 1.3″ up to 32.5″ with a wide variety of resolutions

Segmented Displays

- Intended for applications with predefined segments
- Mostly customized solutions

Black-White-Red EPD

Segmented Black-White EPD

Camera Modules

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- Fully customized CCM (Lens, FPC, Interface)
- COB / CSP resolution
- TOF
- Wide FOV (120 degree)
- Single/Dual camera
- Fixed / Auto focus / LED aimer
- VGA/2M/3M/5M … 13M/21M with FF/AF/PDAF/OIS series

TOF Camera Modules

Gesture recognition   **Face recognition**   **Object recognition**
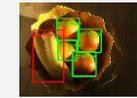
Smart Air Conditioner   **Doorbell Camera**   **Microwave Oven**   **Smart Oven**   **Smart Fridge**   **Robo Vacuum Cleaner**

THANK YOU!

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