

## CPT-CHUNGHWA PICTURE TUBES LTD. AUTOMOTIVE DISPLAYS



**Endrich Bauelemente Vertriebs GmbH has signed a distribution contract with TFT-manufacturer Chunghwa Picture Tubes Ltd.** (CPT). The company from Taiwan was founded in 1971 and is specialised on the production of high end industrial and automotive displays. In total 11,200 employees are responsible for the production at seven facilities world wide.

The enterprise is focused on the development of new liquid crystal technologies. It includes CPTs patented all-view technology HFFS, which is superior to the usual IPS technology in contrast ratio and response time at very low temperatures up to -30°C. Due to the in-house production of TFT-glasses, color filters and backlights, CPT can guarantee long term availability of the displays.

The product range of the global market leader comprised sizes from 5.0" up to 27.6" which has been exhibited at the electronica show 2016 on the Endrich booth for the first time. Beside the standard formats like 4:3 and 16:9, also special formats are included in the portfolio e.g. 27.6" display with its aspect ratio of 16:3. This can be used for passenger information in trains. Next to the captivating image quality of the HFFS technology, high resolution at small size displays can be outlined, too. CPT offers already at 8" displays a higher resolution than Full-HD.

A broad linecard of standard and special sizes are available for the automotive market. Focusing on displays for interior and exterior mirrors as well as cockpits, CPT developed various special sizes. Several production facilities have been certified according to ISO/TS 16949 for automotive industry. In addition to the automotive sector where CPT is one of the top 5 manufacturers, the displays can be implemented especially in industrial applications also in smartphones and tablets for the consumer market.

### CPTS STRENGTHS:

- In-house TFT-glass, color filter and backlight production
- Extended operating temperature of -30°C ... +85°C
- Wide viewing angle of 89°/89°/89°/89° with HFFS-technology
- High contrast ratio with short response time
- Automotive TFT-production lines – certified according to ISO/TS16949
- Special sizes and shapes available



# CPT-CHUNGHWA PICTURE TUBES LTD. AUTOMOTIVE DISPLAYS

SIZE	PART NUMBER	DISPLAY RESOLUTION	BRIGHTNESS [cd/m <sup>2</sup> ]	MIN. BACKLIGHT LIFETIME [H]	INTERFACE	OPERATING TEMPERATURE [°C]	REMARKS
<b>AUTOMOTIVE TFT-DISPLAYS 4.3" - 7.0"</b>							
4.3"	043JD02	480 x 272	600	30 k	RGB	-20 ... +70	TN
5.0"	050LA0A	800 x 480	500	30 k	RGB	-20 ... +70	TN
6.1"	061LA0Q	800 x 480	500	30 k	RGB	-30 ... +85	TN
6.1"	061LA0M	800 x 480	500	30 k	RGB	-20 ... +70	TN
6.2"	062LA01	800 x 480	500	30 k	RGB	-20 ... +70	TN
6.2"	062LA11	800 x 480	500	30 k	RGB	-20 ... +70	TN
6.94"	069LR01	840 x 480	550	30 k	LVDS	-20 ... +70	TN
6.95"	069LA0A	840 x 480	500	30 k	RGB	-30 ... +85	TN
6.95"	069LA0T	840 x 480	500	30 k	RGB	-20 ... +70	TN
6.95"	069LD01	840 x 480	500	30 k	RGB	-30 ... +85	HFFS
6.95"	069NA01	1024 x 600	500	30 k	LVDS	-20 ... +70	TN
7.0"	070LD0D	800 x 480	500	30 k	RGB	-30 ... +85	TN
7.0"	070LF0B	800 x 480	450	30 k	RGB	-20 ... +70	TN
7.0"	070LFA1	800 x 480	450	30 k	RGB	-30 ... +85	TN
7.0"	070LM01	800 x 480	600	30 k	RGB	-30 ... +85	HFFS
7.0"	070LQ01	800 x 480	760	30 k	LVDS	-30 ... +85	HFFS
7.0"	070NJ05	1024 x 600	500	30 k	LVDS	-20 ... +70	TN
7.0"	070NJ07	1024 x 600	600	30 k	LVDS	-20 ... +70	TN
7.0"	070NQ08	1024 x 600	600	30 k	LVDS	-20 ... +70	HFFS



# CPT-CHUNGHWA PICTURE TUBES LTD. AUTOMOTIVE DISPLAYS

SIZE	PART NUMBER	DISPLAY RESOLUTION	BRIGHTNESS [cd/m <sup>2</sup> ]	MIN. BACKLIGHT LIFETIME [H]	INTERFACE	OPERATING TEMPERATURE [°C]	REMARKS
<b>AUTOMOTIVE TFT-DISPLAYS 8.0" - 12.3"</b>							
8.0"	080LG02	800 x 480	550	30 k	RGB	-30 ... +85	TN
8.0"	080LJ01	800 x 480	450	30 k	RGB	-20 ... +70	TN
8.0"	080LJA1	800 x 480	600	30 k	RGB	-30 ... +85	TN
8.0"	080LQ01	800 x 480	1.000	30 k	RGB	-30 ... +85	HFFS
8.0"	080NA12	1024 x 600	600	30 k	LVDS	-20 ... +70	TN
8.0"	080NA32	1024 x 600	600	30 k	LVDS	-20 ... +70	TN
8.0"	080NA23	1024 x 600	670	30 k	LVDS	-30 ... +85	TN
8.0"	080WK03	1280 x 720	600	30 k	LVDS	-30 ... +85	HFFS
8.0"	080WK05	1280 x 720	500	30 k	LVDS	-20 ... +70	HFFS
8.0"	080WK07	1280 x 720	600	30 k	LVDS	-30 ... +85	HFFS
8.0"	080WM01	1280 x 720	765	30 k	LVDS	-30 ... +85	HFFS
8.0"	080WN01	1280 x 720	550	30 k	LVDS	-30 ... +85	TN
8.0"	080WN02	1280 x 720	550	30 k	LVDS	-30 ... +85	TN
8.8"	088WA01	1280 x 800	500	30 k	LVDS	-20 ... +70	HFFS
9.0"	090LC41	800 x 480	450	30 k	RGB	-30 ... +85	TN
9.0"	090LC51	800 x 480	450	30 k	RGB	-30 ... +85	TN
9.0"	090LN01	800 x 480	500	30 k	RGB	-30 ... +85	TN
9.0"	090NA06	1024 x 600	500	30 k	LVDS	-20 ... +70	TN
9.0"	090NB16	1024 x 600	500	30 k	LVDS	-30 ... +85	TN
9.0"	090WB01	1280 x 720	500	30 k	LVDS	-30 ... +85	HFFS
9.0"	090WK05	1280 x 720	500	30 k	LVDS	-20 ... +70	HFFS
10.1"	101ND06	1024 x 600	500	30 k	LVDS	-20 ... +70	TN
10.1"	101WL01	1280 x 720	500	30 k	LVDS	-20 ... +70	TN
10.1"	101WK01	1280 x 720	600	30 k	LVDS	-30 ... +85	HFFS
10.1"	101WK05	1280 x 720	500	30 k	LVDS	-20 ... +70	HFFS
10.1"	101WM01	1280 x 720	550	30 k	LVDS	-20 ... +70	HFFS
10.2"	102NDA1	1024 x 600	600	30 k	LVDS	-30 ... +85	TN
10.3"	103WA01	1280 x 800	600	30 k	LVDS	-20 ... +70	HFFS
10.3"	103WA02	1280 x 800	700	30 k	LVDS	-30 ... +85	HFFS
10.4"	104EA01	960 x 1280	765	30 k	LVDS	-30 ... +85	HFFS
10.4"	104XA12	1024 x 768	400	30 k	LVDS	-20 ... +70	TN
11.4"	114NA13	1024 x 600	500	30 k	LVDS	-20 ... +70	TN
12.1"	121XA02	1024 x 768	600	30 k	LVDS	-30 ... +85	TN
12.3"	123PA01	1440 x 540	800	30 k	LVDS	-30 ... +85	TN
12.3"	123FBA1	1920 x 720	700	30 k	LVDS	-30 ... +85	HFFS