

## PLASTIC LOGIC GERMANY'S FLEXIBLE LECTUM® DISPLAYS

Plastic Logic manufactures flexible, glass-free electrophoretic active matrix displays of various sizes. These displays are perfectly readable under bright conditions, and they consume power only in case of display updates - without power the content remains for years. Compared to conventional electrophoretic displays Plastic Logic's organic transistor (OTFT) technology provides additional and unique features: Our displays are flexible, extremely robust, glass-free as well as lightweight and ultra-thin. Plastic Logic's displays provide proven lifetimes of over five years and more than 10 million page updates. They are especially suited for applications and products in signage and logistics, mobile electronic devices, smart cards and wearables.



### About Plastic Logic Germany

World leading in the development, manufacturing and commercialization of flexible electrophoretic displays, Plastic Logic Germany has successfully industrialized the manufacturing process in its Dresden facility. Working under an exclusive license using a stable and proven transistor platform technology, the company manufactures a full range of high-quality, flexible plastic displays in both low and high volumes. Plastic Logic also runs an open pilot line for flexible electronics. Third party companies are invited to benefit from the company's profound experience in the industrialization and manufacture of flexible electronics.



### OVERVIEW

- Organic thin-film transistor (OTFT) active matrix combined with bi-stable electrophoretic display technology
- Glass-free, bendable and robust
- Lightweight and thin
- Ultra-low power – no continuous refresh cycles required, power is required only in case of a display update
- Daylight-readable and ultra-wide viewing angle
- Available in monochrome with up to 16 gray levels
- Fully customized designs possible

To learn more about how your products could benefit from Plastic Logic Germany's unique plastic displays, please visit [www.plasticlogic.com](http://www.plasticlogic.com), or contact us at [info@plasticlogic.com](mailto:info@plasticlogic.com).

## LECTUM® DISPLAY PLATFORMS AND CUSTOM DISPLAYS

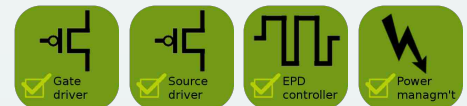
Plastic Logic offers a range of display sizes on three different display platforms. A display platform is mainly defined by the number of controlled pixels. Each platform requires different external electronics and software. Customized designs are fully supported, with particular focus on display size, pixel density, surface finish and electronics setup.

### MAIN DISPLAY FEATURES (INDEPENDENT OF PLATFORM):

- Organic TFT active matrix, incorporating industry leading, bi-stable electrophoretic display technology
- Glass-free, bendable and robust
- Lightweight and thin
- Ultra-low power – no continuous refresh cycles required
- Daylight-readable and ultra-wide viewing angle
- COF (chip-on-film) or COP (chip-on-plastic) driver chips
- Can be combined with touch and frontlight solutions
- Different surface finish options available
- Evaluation kits available for all displays

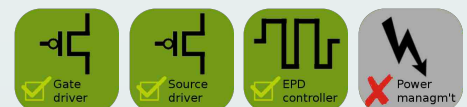
### DISPLAY PLATFORM WITH ULTRACHIP UC8156

- Displays on this platform: 1.1", 1.38", 2.1" and 3.1"
- Highly integrated display driver Ultrachip UC8156 with controller and power management (PMIC) as single chip
- Up to 240 x 160 pixels supported
- Host communication via SPI interface
- Single voltage power supply (1.7 ... 3.6 V), on-chip regulator control for generating driving voltages (external booster circuit required)
- Low current deep sleep mode
- On-chip display RAM and waveform memory available
- Built-in temperate sensor or I2C interface to read external temperature sensor



### DISPLAY PLATFORM WITH EPSON S1D13541

- Displays on this platform: 4.0" and 4.9"
- Two chip solution on COF or COP backend technology
  - EPD controller Epson S1D13541 with integrated 480 lines source driver and display RAM
  - Gate driver supporting up to 800 lines
- Host communication via SPI interface
- External EPD power management required, reference design available



### DISPLAY PLATFORM WITH DRIVERS ONLY

























- Displays on this platform: 4.7", 10.7" and 15.4"
- Resolution and size of platform can be scaled by multiple driver chips
  - m x gate driver
  - n x source driver
- External EPD controller as well as EPD power management required, reference design available



## LECTUM® DISPLAYS FOR EACH PLATFORM AT A GLANCE

Plastic Logic manufactures electrophoretic displays in different sizes.

### DISPLAYS AVAILABLE (1.1" - 4.9"):










	1.1"	1.38"	2.1"	3.1"	4.0"	4.9"
Platform	Ultrachip UC8156				Epson S1D13541	
Resolution	148 x 70	180 x 100	240 x 146	312 x 74	400 x 240	720 x 120
Active area (mm)	25.16 x 11.9	30.6 x 17.0	46.08 x 28.03	75.5 x 17.91	88.0 x 52.8	122.4 x 20.4
Pixel density (ppi)	150	150	132	105	115	150
Bending (radius)	typ. 30 mm	typ. 30 mm	typ. 30 mm	typ. 30 mm	typ. 50 mm	typ. 20 mm
Grey levels	up to 4				up to 16	
Update time	< 900 ms					
Surface	anti-glare / UV protection / hard-coat 2H					
Weight	1.2g	1.5 g	2.2g	2.2 g	4.1 g	3 g
Thickness (µm)	460	460	460	460	650	600
Gate driver (included)						
Source driver (included)						
EPD controller (included)						
Power managem't (included)						
Availability	Eng. samples Volume	Eng. samples	Eng. samples Volume	Eng. samples Volume	Eng. samples Volume	Eng. samples

Evaluation kits are available for all display platforms ensuring a fast and easy way to evaluate and explore the exciting world of Plastic Logic's displays. They consist of microcontroller boards and display specific hardware. The evaluation kits are pre-loaded with firmware and sample images on SD card. They allow a plug and play power up and slide show will start automatically. Own images can be used (e. g. just copy to SD card). Kit's PCB, schematics and firmware are available as reference for reuse which enables customers to easily develop their own applications.

## LECTUM® DISPLAYS FOR EACH PLATFORM AT A GLANCE

Plastic Logic manufactures electrophoretic displays in different sizes.

### DISPLAYS AVAILABLE (4.7" - 15.4"):

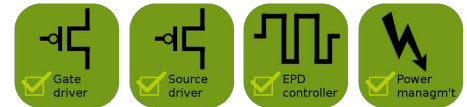
	4.7"	10.7"	15.4"
Platform	Drivers only		
Resolution	800 x 450	1280 x 960	1920 x 1280
Active area (mm)	103.7 x 58.3	217.6 x 163.2	326.4 x 217.6
Pixel density (ppi)	196	150	150
Bending (radius)	typ. 50 mm	typ. 50 mm	typ. 100 mm
Grey levels	up to 16		
Update time	< 900 ms		
Surface	anti-glare / UV protection / hard-coat 2H		
Weight	6 g	37 g	92 g
Thickness (µm)	650	650	730
Gate driver (included)			
Source driver (included)			
EPD controller (included)			
Power managm't (included)			
Availability	Eng. samples Volume	Eng. samples Volume	Eng. samples Volume

Evaluation kits are available for all display platforms ensuring a fast and easy way to evaluate and explore the exciting world of Plastic Logic's displays. They consist of microcontroller boards and display specific hardware. The evaluation kits are pre-loaded with firmware and sample images on SD card. They allow a plug and play power up and slide show will start automatically. Own images can be used (e. g. just copy to SD card). Kit's PCB, schematics and firmware are available as reference for reuse which enables customers to easily develop their own applications.

## DISPLAY 1.1" WITH ULTRACHIP UC8156

Active matrix electrophoretic display (EPD) with **Ultrachip UC8156** single chip EPD controller with integrated drivers and power management supporting **148 x 70 pixels**. This display is particularly suitable for smartcards, wearables and labels.

### TECHNICAL PARAMETERS

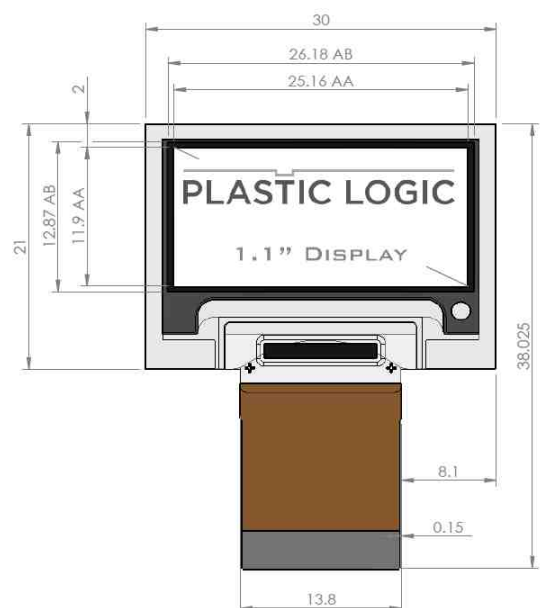


Resolution	148 x 70
Active area	25.16 x 11.9 mm (1.1" diagonal)
Pixel density	150 ppi
Bendability	typical 30 mm radius (except chip area)
Grey levels	up to 4
Update time @ room temp	< 900 ms (4 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	1.2 g
Thickness	460 µm
EPD controller	Ultrachip 8156
Evaluation kit	K_MSP430
Operating conditions	0 °C to 40 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Integrated display driver with controller and PMIC based on COP (chip-on-plastic) backend technology
- Host communication via SPI interface
- Single voltage power supply (1.7 ... 3.6 V), on-chip regulator control for generating driving voltages (external booster circuit required)
- Low current deep sleep mode
- On-chip frame buffer and non-volatile waveform memory
- I2C interface for reading external temperature sensor
- Can be combined with third-party touch solutions
- Evaluation kit available for driving images

### DIMENSIONS



## REFERENCE DISPLAY 1.38" WITH ULTRACHIP UC8156

Active matrix electrophoretic display (EPD) with **Ultrachip UC8156** single chip EPD controller with integrated drivers and power management supporting **180 x 100 pixels**. This display is particularly suitable for smartcards, wearables and labels.

### TECHNICAL PARAMETERS

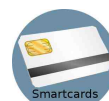
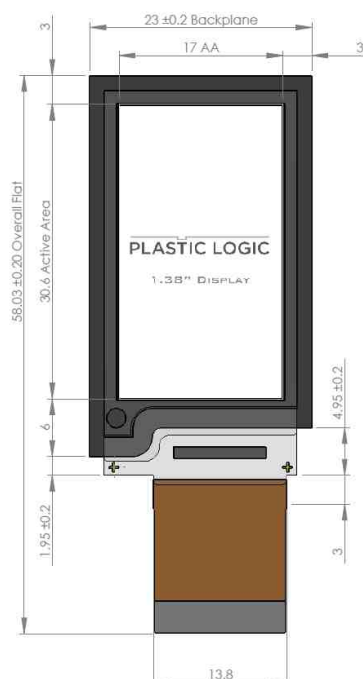


Resolution	180 x 100
Active area	30.6 x 17.0 mm (1.38" diagonal)
Pixel density	150 ppi
Bendability	typical 30 mm radius (except chip area)
Grey levels	up to 4
Update time @ room temp	< 900 ms (4 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	1.5 g
Thickness	460 µm
EPD controller	Ultrachip 8156
Evaluation kit	K_MSP430
Operating conditions	0 °C to 40 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Integrated display driver with controller and PMIC based on COP (chip-on-plastic) backend technology
- Host communication via SPI interface
- Single voltage power supply (1.7 ... 3.6 V), on-chip regulator control for generating driving voltages (external booster circuit required)
- Low current deep sleep mode
- On-chip frame buffer and non-volatile waveform memory
- I2C interface for reading external temperature sensor
- Can be combined with third-party touch solutions
- Evaluation kit available for driving images

### DIMENSIONS



## DISPLAY 2.1" WITH ULTRACHIP UC8156

Active matrix electrophoretic display (EPD) with **Ultrachip UC8156** single chip EPD controller with integrated drivers and power management supporting **240 x 146 pixels**. This display is particularly suitable for smartcards, wearables and labels.

### TECHNICAL PARAMETERS

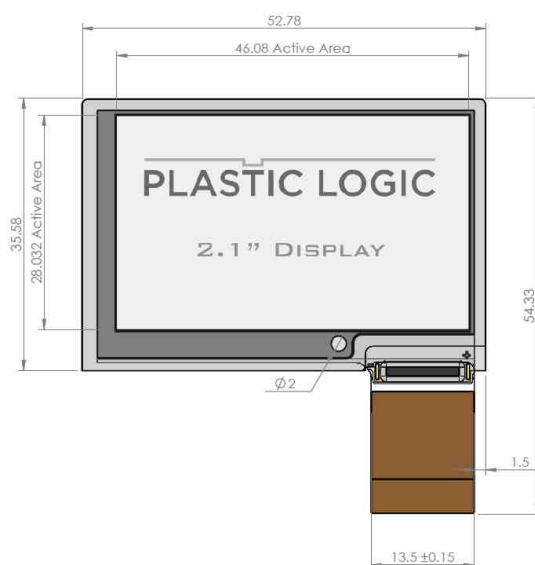


Resolution	240 x 146
Active area	46.08 x 28.03 mm (2.1" diagonal)
Pixel density	132 ppi
Bendability	typical 30 mm radius (except chip area)
Grey levels	up to 4
Update time @ room temp	< 900 ms (4 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	2.2 g
Thickness	460 µm
EPD controller	Ultrachip 8156
Evaluation kit	K_MSP430
Operating conditions	0 °C to 40 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Integrated display driver with controller and PMIC based on COP (chip-on-plastic) backend technology
- Host communication via SPI interface
- Single voltage power supply (1.7 ... 3.6 V), on-chip regulator control for generating driving voltages (external booster circuit required)
- Low current deep sleep mode
- On-chip frame buffer and non-volatile waveform memory
- I2C interface for reading external temperature sensor
- Can be combined with third-party touch solutions
- Evaluation kit available for driving images

### DIMENSIONS

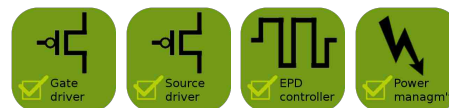




## DISPLAY 3.1" WITH ULTRACHIP UC8156

Active matrix electrophoretic display (EPD) with **Ultrachip UC8156** single chip EPD controller with integrated drivers and power management supporting **312 x 74 pixels**. This display is particularly suitable for smartcards, wearables and labels.

### TECHNICAL PARAMETERS

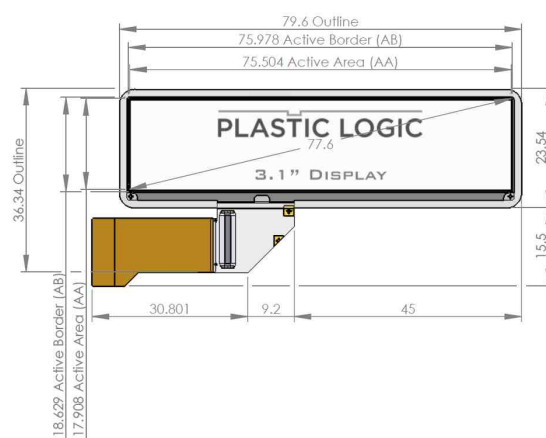


Resolution	312 x 74
Active area	75.5 x 17.91 mm (3.1" diagonal)
Pixel density	105 ppi
Bendability	typical 30 mm radius (except chip area)
Grey levels	up to 4
Update time @ room temp	< 900 ms (4 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	2.2 g
Thickness	460 µm
EPD controller	Ultrachip 8156
Evaluation kit	K_MSP430
Operating conditions	0 °C to 40 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Integrated display driver with controller and PMIC based on COP (chip-on-plastic) backend technology
- Host communication via SPI interface
- Single voltage power supply (1.7 ... 3.6 V), on-chip regulator control for generating driving voltages (external booster circuit required)
- Low current deep sleep mode
- On-chip frame buffer and non-volatile waveform memory
- I2C interface for reading external temperature sensor
- Can be combined with third-party touch solutions
- Evaluation kit available for driving images

### DIMENSIONS





## DISPLAY 4.0" WITH EPSON S1D13541

Active matrix electrophoretic display (EPD) with **Epson S1D13541** EPD controller and drivers supporting **400 x 240 pixels**. This display is particularly suited for mobile phone and logistic applications.

### TECHNICAL PARAMETERS

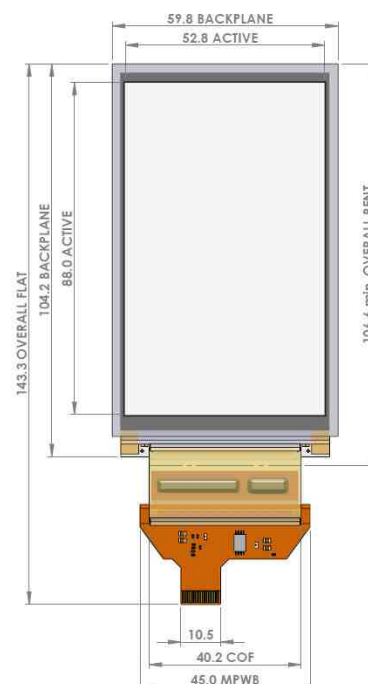


Resolution	400 x 240
Active area	88.0 x 52.8 mm (4.0" diagonal)
Pixel density	115 ppi
Bendability	typical 50 mm radius (except chip area)
Grey levels	up to 16
Update time @ room temp	< 900 ms (16 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	4.1 g
Thickness	650 µm
EPD controller	Epson S1D13541
Evaluation kits	K_MSP430 <b>or</b> K_Beaglebone
Operating conditions	0 °C to 50 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Two chip solution on single COF (chip-on-film); can be folded behind display
  - EPD controller with source driver and display RAM
  - Gate driver
- Host communication via SPI interface
- External EPD power management required
- Can be combined with third-party touch solutions
- Evaluation kits available for driving images

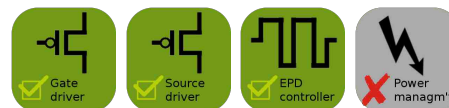
### DIMENSIONS



## REFERENCE 'BRACELET' DISPLAY 4.9" WITH EPSON S1D13541

Active matrix electrophoretic display (EPD) with **Epson S1D13541** EPD controller and drivers supporting **720 x 120 pixels**. This display is particularly suited for wearable applications.

### TECHNICAL PARAMETERS

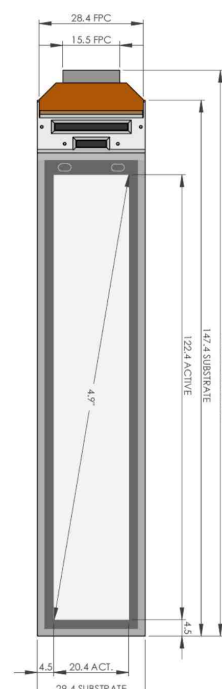


Resolution	720 x 120
Active area	122.4 x 20.4 mm (4.9" diagonal)
Pixel density	150 ppi
Bendability	typical 20 mm radius (except chip area)
Grey levels	up to 16
Update time @ room temp	< 900 ms (16 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	3 g
Thickness	600 µm
EPD controller	Epson S1D13541
Evaluation kits	K_MSP430 <b>or</b> K_Beaglebone
Operating conditions	0 °C to 50 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Two chip solution on COP (chip-on-plastic) backend technology
  - EPD controller with source driver and display RAM
  - Gate driver
- Host communication via SPI interface
- External EPD power management required
- Can be combined with third-party touch solutions
- Evaluation kits available for driving images

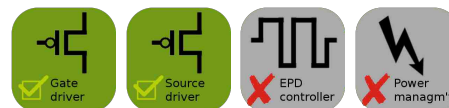
### DIMENSIONS



## DISPLAY 4.7" WITH DRIVERS ONLY

Active matrix electrophoretic display (EPD) with **gate and source drivers** supporting **800 x 450 pixels**. This display is particularly suited for mobile phone and logistic applications.

### TECHNICAL PARAMETERS

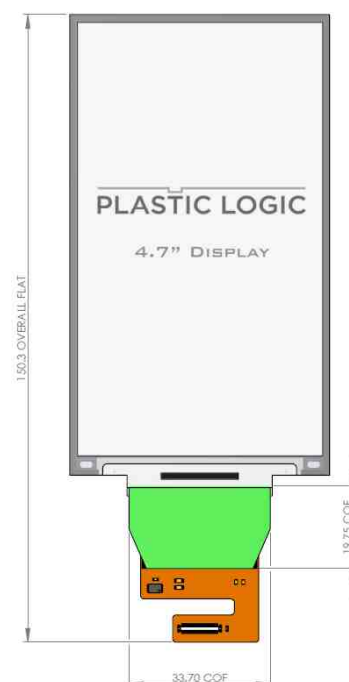


Resolution	800 x 450
Active area	103.68 x 58.32 mm (4.7" diagonal)
Pixel density	196 ppi
Bendability	typical 50 mm radius (except chip area)
Grey levels	up to 16
Update time @ room temp	< 900 ms (16 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	6 g
Thickness	650 µm
EPD controller	external
Evaluation kits	K_MSP430 <b>or</b> K_Beaglebone <b>or</b> K_i.MX6
Operating conditions	0 °C to 50 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Two chip solution on COP/COF (COF can be folded behind display)
  - Source driver (COP)
  - Gate driver (COF)
- External EPD controller as well as EPD power management required
- Can be combined with third-party touch solutions
- Evaluation kits available for driving images

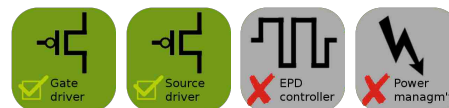
### DIMENSIONS



## DISPLAY 10.7" WITH DRIVERS ONLY

Active matrix electrophoretic display (EPD) with **gate and source drivers** supporting **1280 x 960 pixels**. This display is particularly suited for e-book and signage applications.

### TECHNICAL PARAMETERS

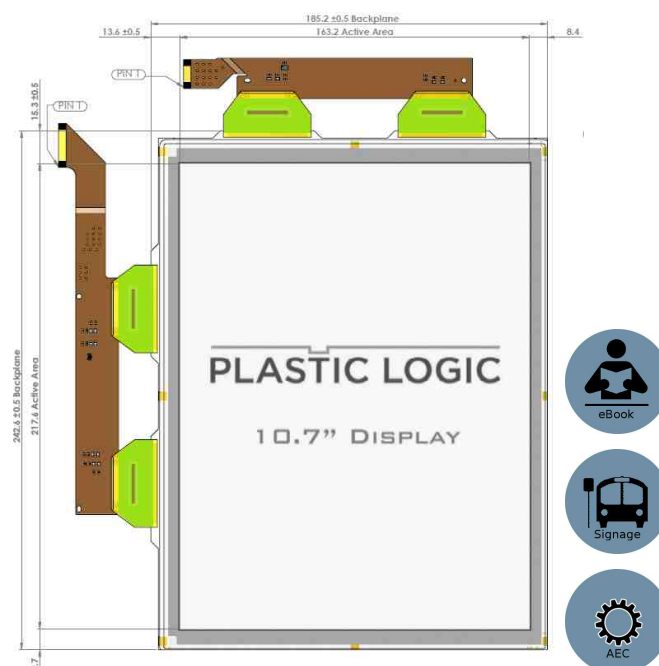


Resolution	1280 x 960
Active area	217.6 x 163.2 mm (10.7" diagonal)
Pixel density	150 ppi
Bendability	typical 50 mm radius (except chip area)
Grey levels	up to 16
Update time @ room temp	< 900 ms (16 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	37 g
Thickness	650 µm
EPD controller	external
Evaluation kits	K_MSP430 <b>or</b> K_Beaglebone <b>or</b> K_i.MX6
Operating conditions	0 °C to 50 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Four chip solution on double COF (can be folded behind display)
  - Source driver
  - Gate driver
- External EPD controller as well as EPD power management required
- Can be combined with third-party touch solutions
- Evaluation kits available for driving images

### DIMENSIONS



## DISPLAY 15.4" WITH DRIVERS ONLY

Active matrix electrophoretic display (EPD) with **gate and source drivers** supporting **1920 x 1280 pixels**. This display is particularly suited for signage and large screen applications.

### TECHNICAL PARAMETERS



Resolution	1920 x 1280
Active area	326.4 mm (+1.0 mm gap) x 217.6 mm (15.4" diagonal)
Pixel density	150 ppi
Grey levels	up to 16
Update time @ room temp	< 900 ms (16 grey-level), faster for mono-updates
Surface	anti-glare / UV protection / hard-coat 2H
Weight	92 g
Thickness	730 µm
EPD controller	external
Evaluation kit	K_i.MX6
Operating conditions	0 °C to 50 °C / 15 %rH to 85 %rH
Storage conditions	-25 °C to 50 °C / 15 %rH to 85 %rH

### KEY FEATURES

- Organic TFT active matrix incorporating industry leading, bi-stable electrophoretic display technology
- 2-up tiled assembly based on 2 x 10.7" displays for double size active area
- Ultra-low power – no continuous refresh cycles required
- Thin, flexible, robust, lightweight
- Ultra-wide viewing angle
- Multi-chip solution on double COF (can be folded behind display)
  - Source driver
  - Gate driver
- External EPD controller as well as EPD power management required
- Can be combined with third-party touch solutions
- Evaluation kit available for driving images

### DIMENSIONS



## EVALUATION KITS - OVERVIEW

Plastic Logic offers evaluation kits for all display platforms ensuring a quick and easy evaluation of our displays. The evaluation kits are prepared to be compatible with the corresponding display platform, and provide the required external electronics and the software to operate the displays out of the box.

### MAIN FEATURES:

- Quick and easy way to evaluate and explore Plastic Logic Germany's display technology
- They will be prepared as complete kits (K\_); however, the kit structure follows a modular approach containing
  - MCU (M\_),
  - display specific reference board (C\_),
  - wire (W\_) (if required),
  - display connector board (B\_) (if required),
  - firmware and manuals
- The hardware is well-tuned according to different display needs, and according to customer preferences
- Pre-loaded SD card with software and sample images provided
- Plug and Play power up and slide show start
- Own images can be used (e.g. just copy to SD card)
- Firmware source code is available as microcontroller code or as Linux drivers
- Firmware can be easily adapted to other processor platforms
- Kit's PCB, schematics and firmware available as reference for reuse - enables customers to easily develop own applications

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## EVALUATION KIT FOR ULTRACHIP UC8156-BASED DISPLAY PLATFORM

The Ultrachip UC8156 on the displays 1.1", 1.38", 2.1" and 3.1" comes with integrated gate and source drivers, an EPD hardware controller and power management. The components included in the MSP430-Kit are a MCU board and the display specific reference board. All components are fully compatible with all displays on this platform, no update in terms of hardware or firmware is required.

## EVALUATION KITS FOR EPSON S1D13541-BASED DISPLAY PLATFORM

The Epson S1D13541 on the displays 4.0" and 4.9" has the hardware EPD controller already integrated. The components included in the MSP430-Kit and in the Beaglebone-Kit are a MCU board and the display specific reference board. The Beaglebone-Kit; however, additionally requires a MCU connector board. If necessary the display connector is included, too.

## EVALUATION KITS FOR DRIVERS ONLY DISPLAY PLATFORM

For 4.7", 10.7" and 15.4" drivers only displays, an additional external EPD controller is required. Plastic Logic can provide either a stand-alone EPD controller setup (MSP430-Kit and Beaglebone-Kit), or a system-on-chip (SoC) with the EPD controller integrated into a microcontroller (i.MX6-Kit).

The components included in all kits are a MCU board and a display specific reference board. Wires and display connectors are included, too.

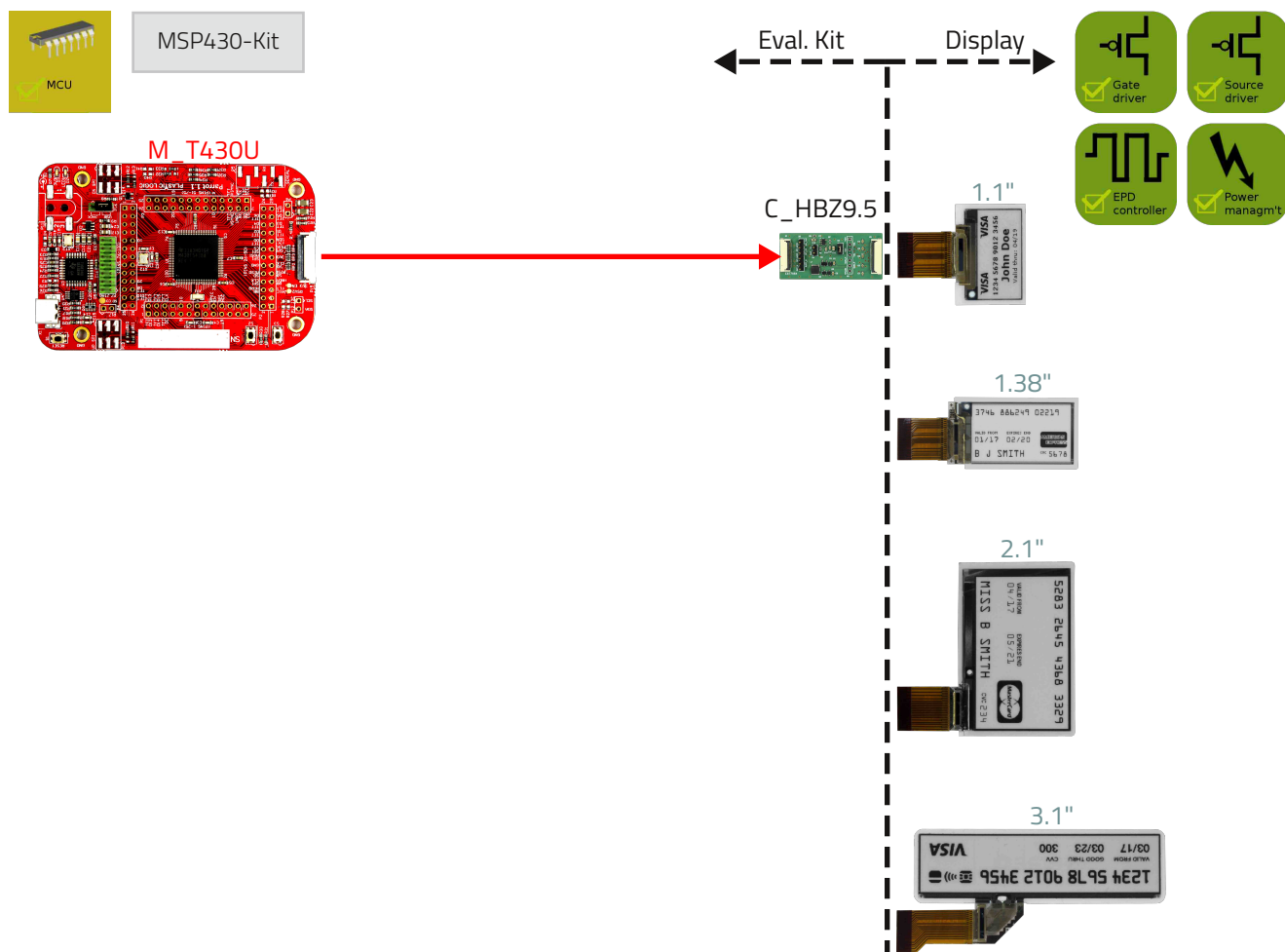
## EVALUATION KITS - OVERVIEW BY KIT-TYPE FOR ALL DISPLAYS

	K_MSP430	K_Beaglebone	K_i.MX6
1.1 inch display			
1.38 inch display			
2.1 inch display			
3.1 inch display			
4.0 inch display			
4.9 inch display			
4.7 inch display			
10.7 inch display			
15.4 inch display			
System boot time			
System power consumption			
Performance (update frequency)	for small displays for large displays		
System language			



## EVALUATION KIT FOR 1.1", 1.38", 2.1" AND 3.1" DISPLAYS

Evaluation kit based on Texas Instruments MSP430 (MCU)

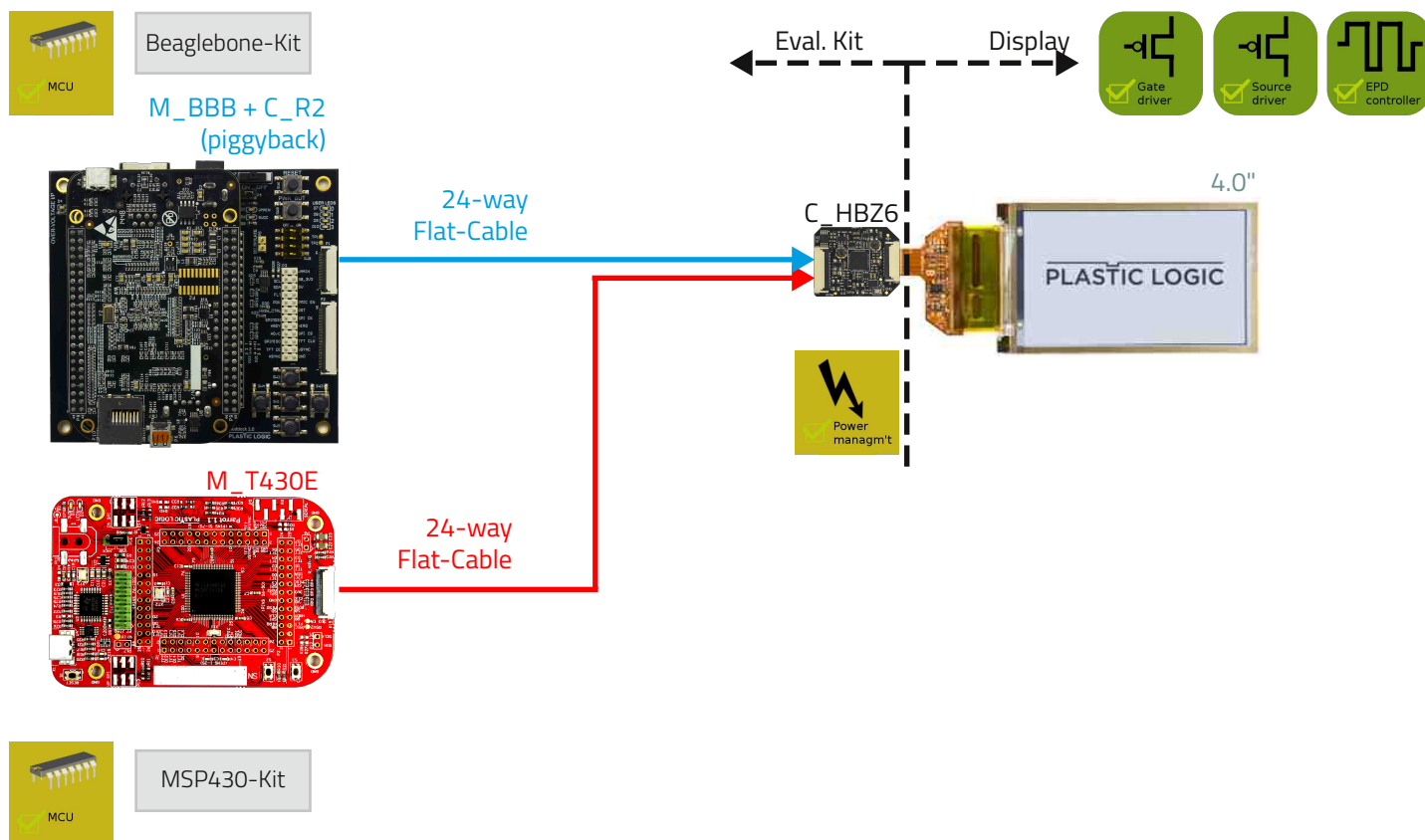


## TECHNICAL PARAMETERS

Evaluation kit code	K_MSP430 (MSP430-Kit)
Evaluation kit contains	M_T430U + C_HBZ9.5
Compatible displays	1.1" / 1.38" / 2.1" / 3.1"
EPD controller	Ultrachip UC8156, on-display
Display specific reference board (Plastic Logic design)	HBZ9.5, contains few required external components for power management support
MCU board	Parrot (Plastic Logic design)
MCU processor	TI MSP430F5438A
MCU operating system	None (microcontroller unit)
MCU interface	JTAG programmer (not included) / SD

## EVALUATION KITS FOR 4" DISPLAYS

Evaluation kits based on Beaglebone (Linux) or Texas Instruments MSP430 (MCU)

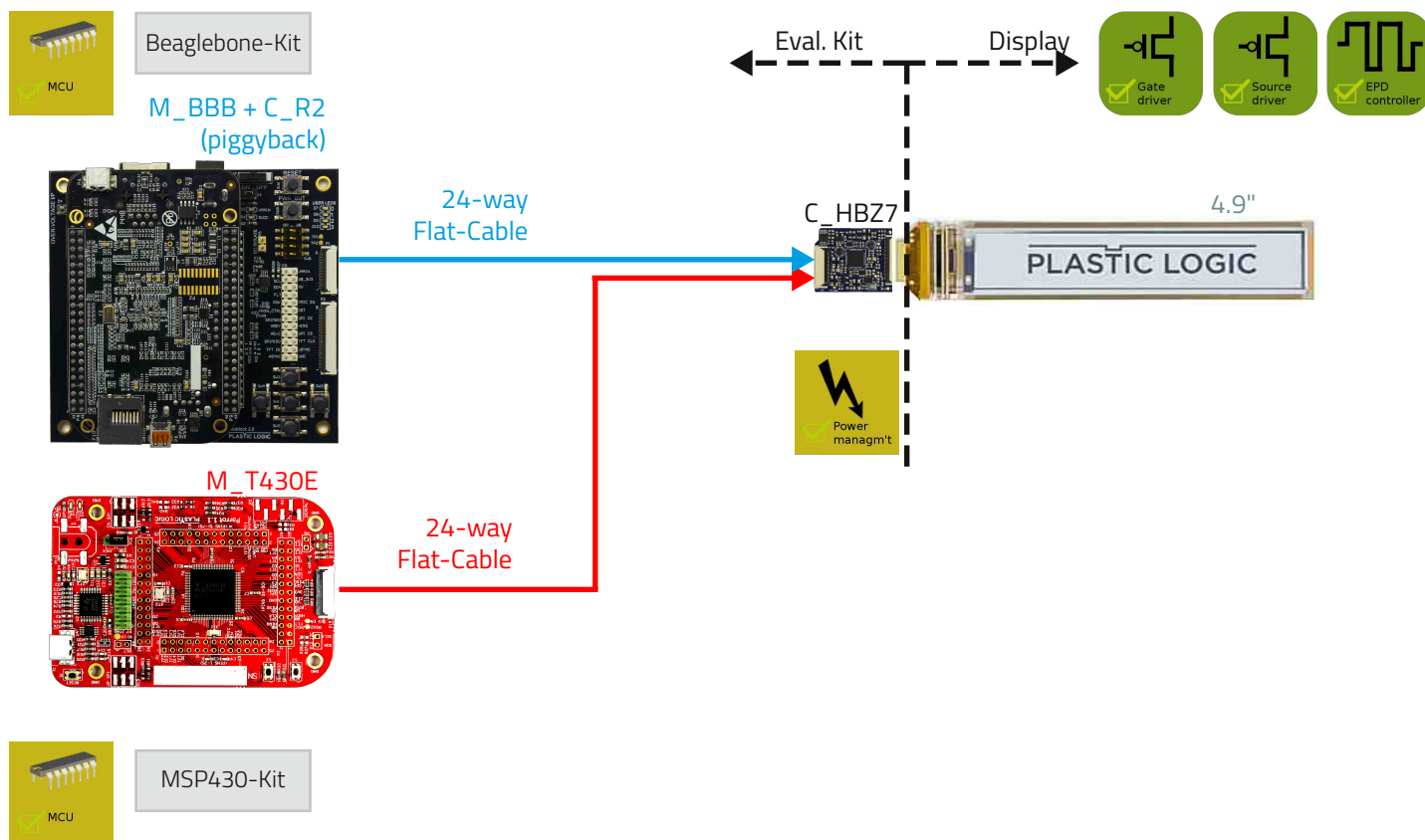


## TECHNICAL PARAMETERS

Evaluation kit codes	K_MSP430 (MSP430-Kit)	K_Beaglebone (Beaglebone-Kit)
Evaluation kits contain	M_T430E + C_HBZ6	M_BBB + C_R2 + C_HBZ6
Compatible displays	4.0"	4.0"
EPD controller	EPSON S1D13541, on-display	EPSON S1D13541, on-display
Display specific reference board (Plastic Logic design)	C_HBZ6, contains power management and passive and active components	C_HBZ6, contains power management and passive and active components
MCU board	Parrot (Plastic Logic design)	Beaglebone
MCU processor	TI MSP430F5438A	ARM Cortex-A8
MCU operating system	None (microcontroller unit)	Linux with EPD frame buffer driver
MCU interface	JTAG programmer (not included) / SD	USB / Ethernet / Serial / SD

## EVALUATION KITS FOR 4.9" DISPLAYS

Evaluation kits based on Beaglebone (Linux) or Texas Instruments MSP430 (MCU)

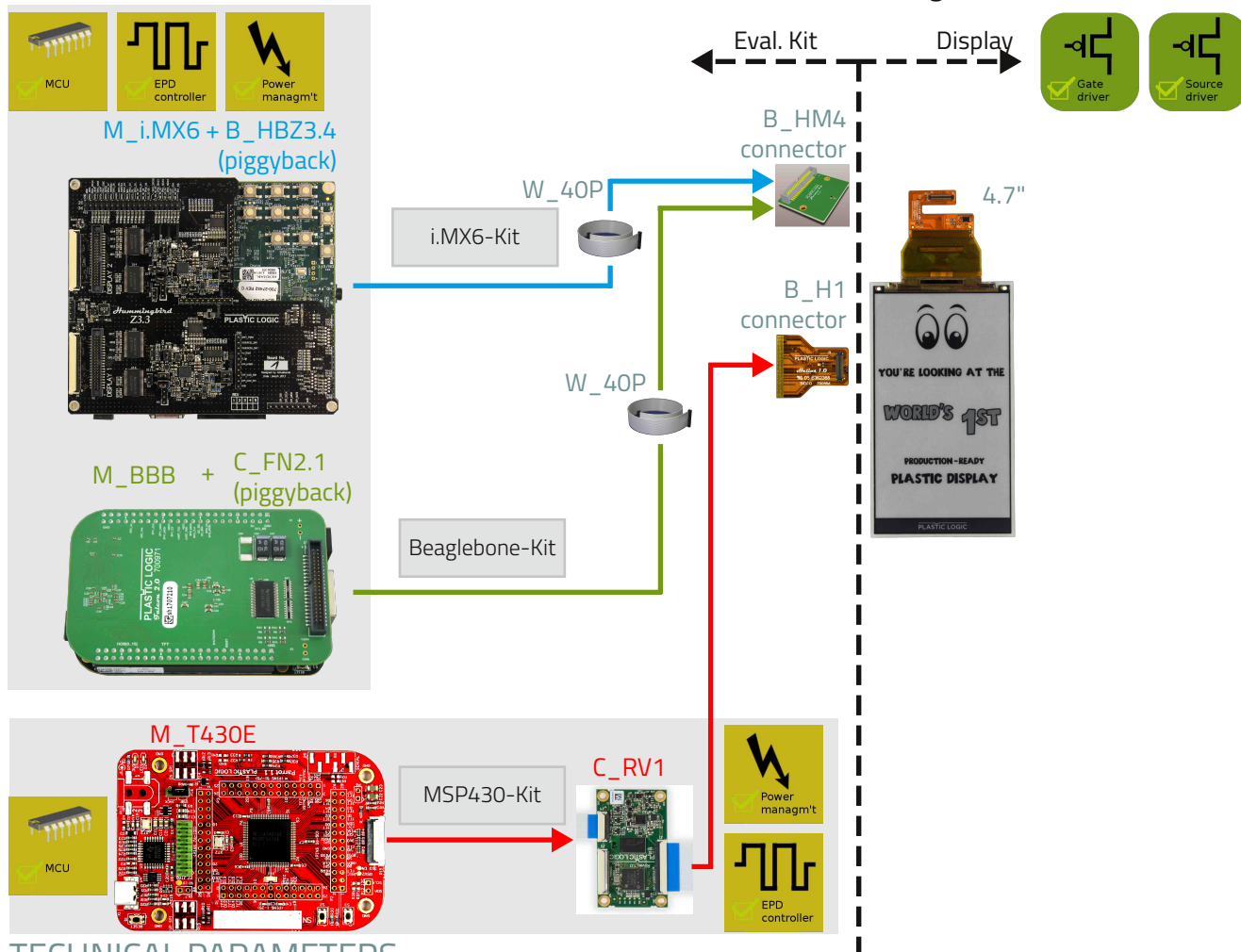


## TECHNICAL PARAMETERS

Evaluation kit codes	K_MSP430 (MSP430-Kit)	K_Beaglebone (Beaglebone-Kit)
Evaluation kits contain	M_T430E + C_HBZ7	M_BBB + C_R2 + C_HBZ7
Compatible displays	4.9"	4.9"
EPD controller	EPSON S1D13541, on-display	EPSON S1D13541, on-display
Display specific reference board (Plastic Logic design)	C_HBZ7, contains power management and passive and active components	C_HBZ7, contains power management and passive and active components
MCU board	Parrot (Plastic Logic design)	Beaglebone
MCU processor	TI MSP430F5438A	ARM Cortex-A8
MCU operating system	None (microcontroller unit)	Linux with EPD frame buffer driver
MCU interface	JTAG programmer (not included) / SD	USB / Ethernet / Serial / SD

## EVALUATION KITS FOR 4.7" DISPLAYS

Evaluation kits based on Freescale i.MX6 (Linux), TI MSP430 (MCU) or Beaglebone (Linux)

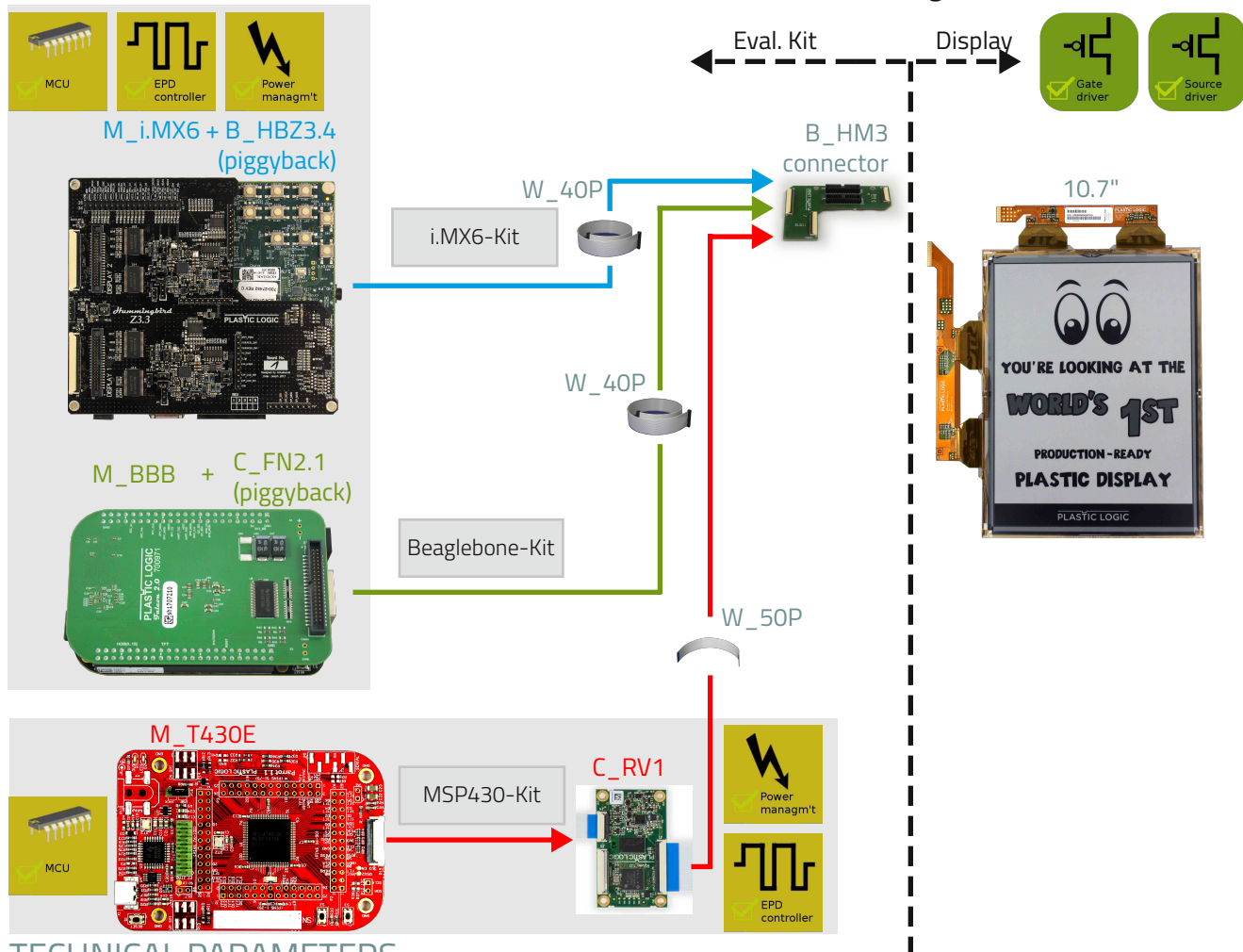


## TECHNICAL PARAMETERS

Evaluation kit codes	K_MSP430 (MSP430-Kit)	K_Beaglebone (Beaglebone-Kit)	K_i.MX6 (i.MX6-Kit)
Evaluation kits contain	M_T430E + C_RV1 + B_H1	B_BBB + C_FN2.1 + W_40P + B_HM4	M_i.MX6 + C_HBZ3.4 + W_40P + B_HM4
Compatible displays	4.7"	4.7"	4.7"
EPD controller	EPSON S1D13524 on C_RV1 board	EPSON S1D13524 on C_FN2.1 board	i.MX6SL (SoC)
Display specific reference board (Plastic Logic design)	C_RV1 board, contains EPD controller, power management & RAM management	C_FN2 board, contains EPD controller, power management & RAM management	C_HBZ3.4 board, contains multiple display power management and front light support
MCU board	Parrot (Plastic Logic design)	Beaglebone white / black	IMX6SLEVK
MCU processor	TI MSP430F5438A	Arm® Cortex®-A8	Arm® Cortex®-A9
MCU operating system	None (µC unit)	Linux	Linux
MCU interface	JTAG programmer (not included) / SD	USB / Ethernet / Serial / SD	USB / Ethernet / Serial / SD

## EVALUATION KITS FOR 10.7" DISPLAYS

Evaluation kits based on Freescale i.MX6 (Linux), TI MSP430 (MCU) or Beaglebone (Linux)



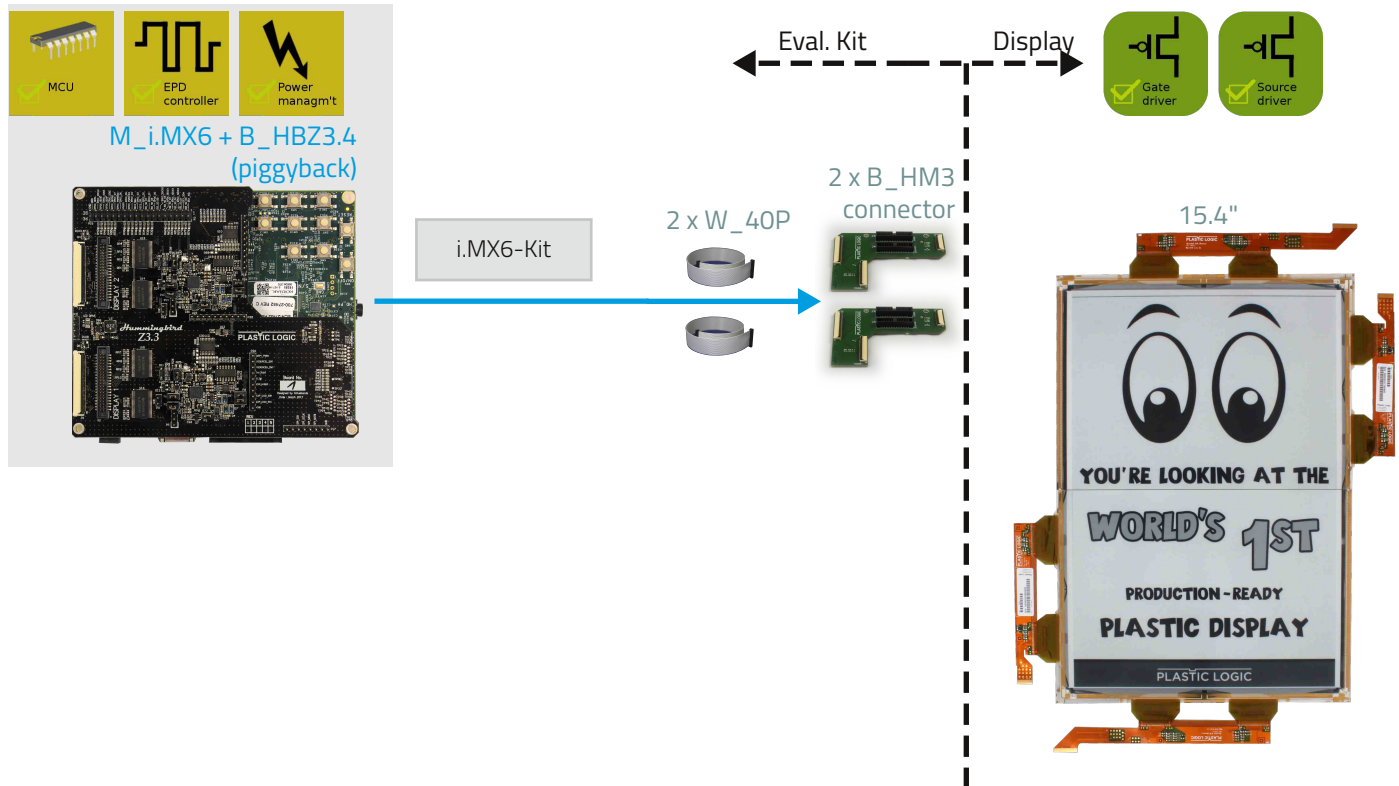
## TECHNICAL PARAMETERS

Evaluation kit codes	K_MSP430 (MSP430-Kit)	K_Beaglebone (Beaglebone-Kit)	K_i.MX6 (i.MX6-Kit)
Evaluation kits contain	M_T430E + C_RV1 + W_50P + B_HM3	B_BBB + C_FN2.1 + W_40P + B_HM3	M_i.MX6 + C_HBZ3.4 + W_40P + B_HM3
Compatible displays	10.7"	10.7"	10.7"
EPD controller	EPSON S1D13524 on C_RV1 board	EPSON S1D13524 on C_FN2.1 board	i.MX6SL (SoC)
Display specific reference board (Plastic Logic design)	C_RV1 board, contains EPD controller, power management & RAM management	C_FN2 board, contains EPD controller, power management & RAM management	C_HBZ3.4 board, contains multiple display power management and front light support
MCU board	Parrot (Plastic Logic design)	Beaglebone white / black	IMX6SLEVK
MCU processor	TI MSP430F5438A	Arm® Cortex®-A8	Arm® Cortex®-A9
MCU operating system	None (µC unit)	Linux	Linux
MCU interface	JTAG programmer (not included) / SD	USB / Ethernet / Serial / SD	USB / Ethernet / SD



## EVALUATION KIT FOR 15.4" DISPLAYS

Evaluation kit based on Freescale i.MX6 (Linux)



## TECHNICAL PARAMETERS

Evaluation kit code	K_i.MX6 (i.MX6-Kit)
Evaluation kit contains	M_i.MX6 + C_HBZ3.4 + 2 x W_40P + 2 x B_HM3
Compatible displays	15.4"
EPD controller	i.MX6SL (SoC)
Display specific reference board (Plastic Logic design)	C_HBZ3.4 board, contains multiple display power management and front light support
MCU board	IMX6SLEVK
MCU processor	Arm® Cortex®-A9
MCU operating system	Linux
MCU interface	USB / Ethernet / SD



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