DTouch

HMI solutions by DTI

dti
WHERE
PASSION
MEETS
INNOVATION

DTouch range

DTouch products are the DTI's proposal for HMI solutions. They are designed to satisfy all the needs of the customers in terms of user interface and IoT.

DTouch-0, DTouch-1 and DTouch-2 are three hardware platforms designed to equip any machine with a user interface suitable for its product segment, from entry level to top of the range.

The devices are tested both from the functional point of view than at electrical level, guaranteeing a high standard of reliability and quality.
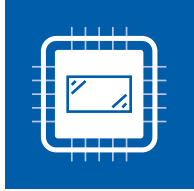
DTouch SOLUTIONS

DTouch-0

ST ARM Cortex M4

DTI Libraries and firmware

DTouch-1

ST ARM Cortex M7 - 2 Mb Flash

DTI Libraries and firmware

DTouch-2

ARM Cortex-A7 NXP i.MX8M Mini Family

Linux and Android

DTouch-0

User interface optimized for small displays and light graphics

- Processor ARM®Cortex® - M4 32bit RISC
- Frequency: up to 84MHz
- TFT size: 2,4", 2,8", 3,5"
- Power supply: 5-12Vdc
- Low power RTC
- Communication: Modbus RS485, TTL and various customizable I/O, USB
- Connectivity: DTI DConnect modules

UART

I2C

2x ACDC

RS485

Capacitive touch
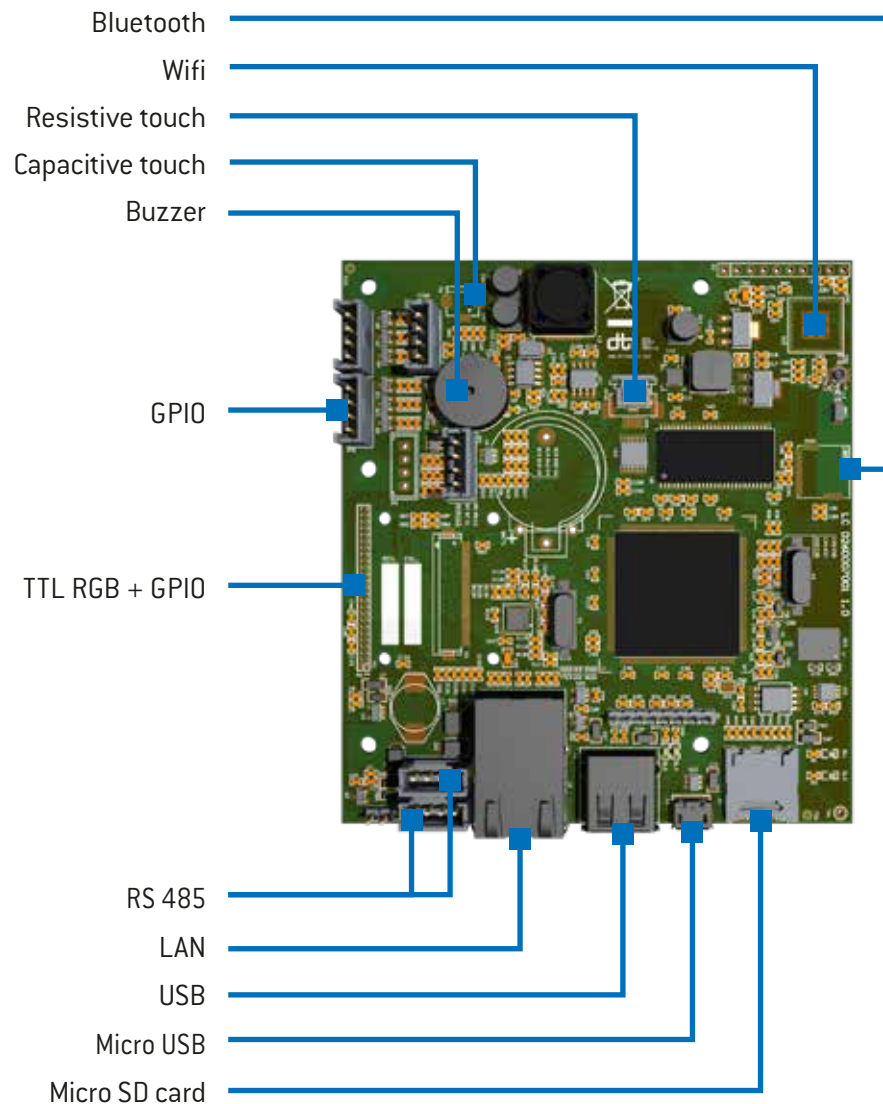
Open collector
100mA max

VBat

SPI
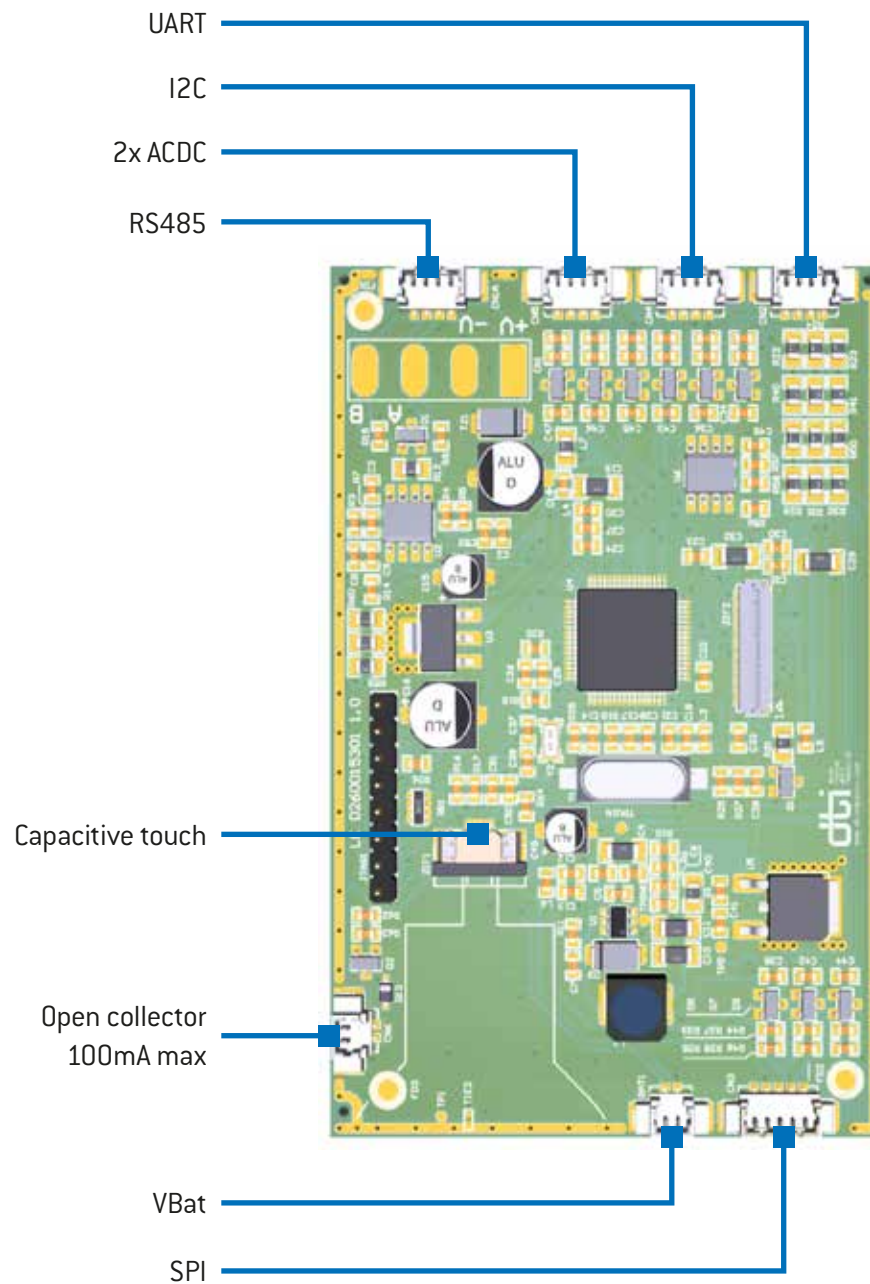
DTouch-1

Electronics equipped with a graphic accelerator, which allows a responsive human-machine interface, suitable for medium-sized displays.

- High performance processor, ARM®Cortex®- M7 32bit
- Flash memory: up to 1Mbyte
- SRAM: 320 KByte + 8MByte (ext)
- Frequency: 216MHz
- TFT sizes: up to 10,1"
- Power supply: 5-12Vdc
- Communication interfaces: Modbus RS485, TTL and customizable I/O, USB and micro SD
- Connectivity: DTI Dconnect modules

Bluetooth

Wifi

Resistive touch

Capacitive touch

Buzzer

GPIO

TTL RGB + GPIO
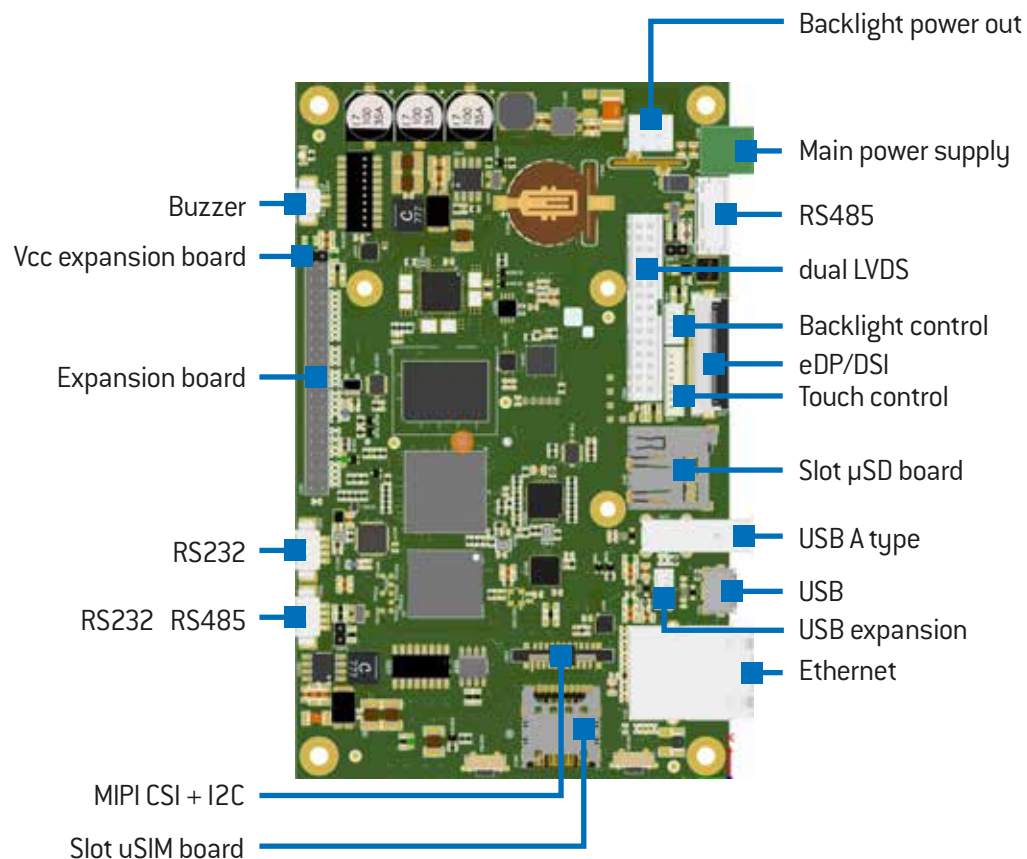
RS 485
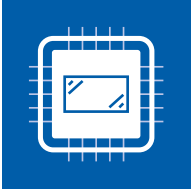
LAN

USB

Micro USB

Micro SD card

DTouch-2

Embedded solution with high performance. It guarantees energy efficiency, multimedia capabilities and integrated ML/AI. Suitable for any display size.

- New state-of-the-art processor, ARM® Cortex®-A7 NXP i.MX8M Mini Family
- Frequency: up to 1,6GHz
- 512MiB to 2GiB LPDDR4 RAM memory
- Storage memory: 8GiB eMMC Flash eMMC standard BGA 153 pin
- Power supply: 9÷36V
- TFT dimensions: from 5" to 21,5"
- Connectivity: PCIe connector for phone connection, Bluetooth 5.0, Wi-Fi 802.11ac/a/ b/g/n, Ethernet interface, RS232, RS485

Backlight power out

Main power supply

RS485

dual LVDS

Backlight control

eDP/DSI

Touch control

Slot µSD board

USB A type

USB

USB expansion

Ethernet

Buzzer

Vcc expansion board

Expansion board

RS232

RS232   RS485

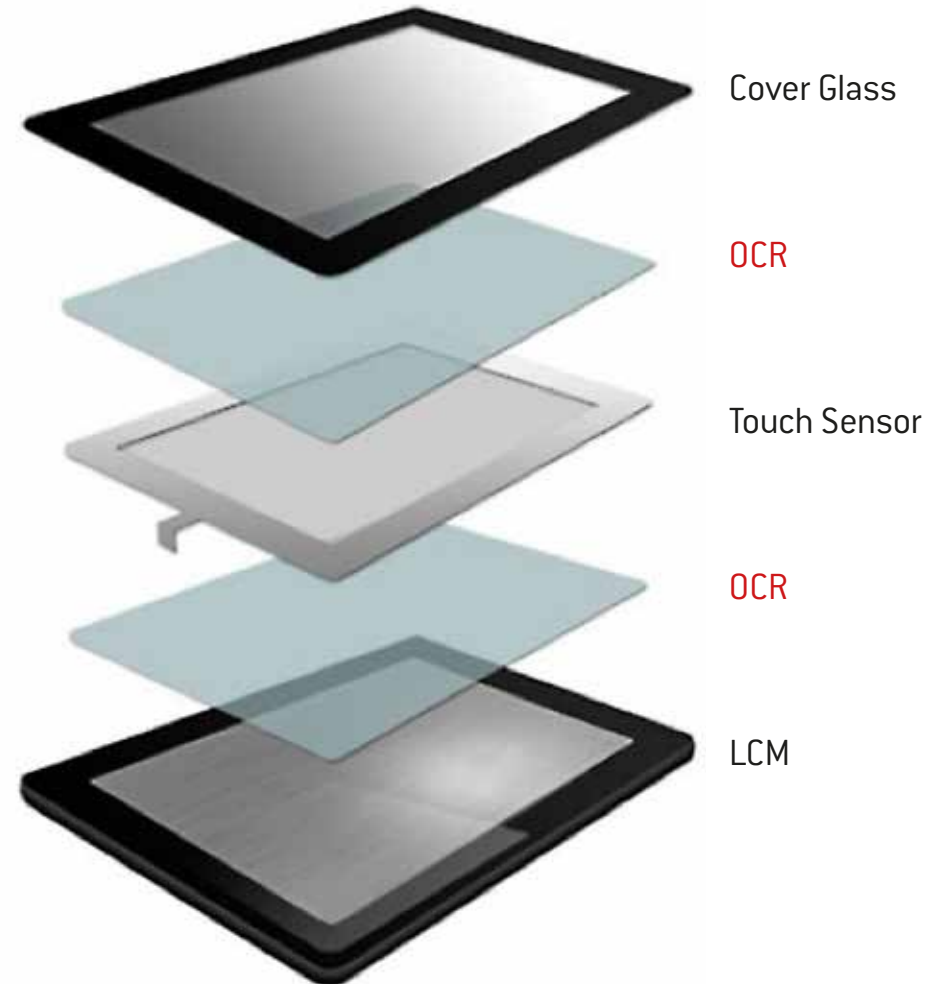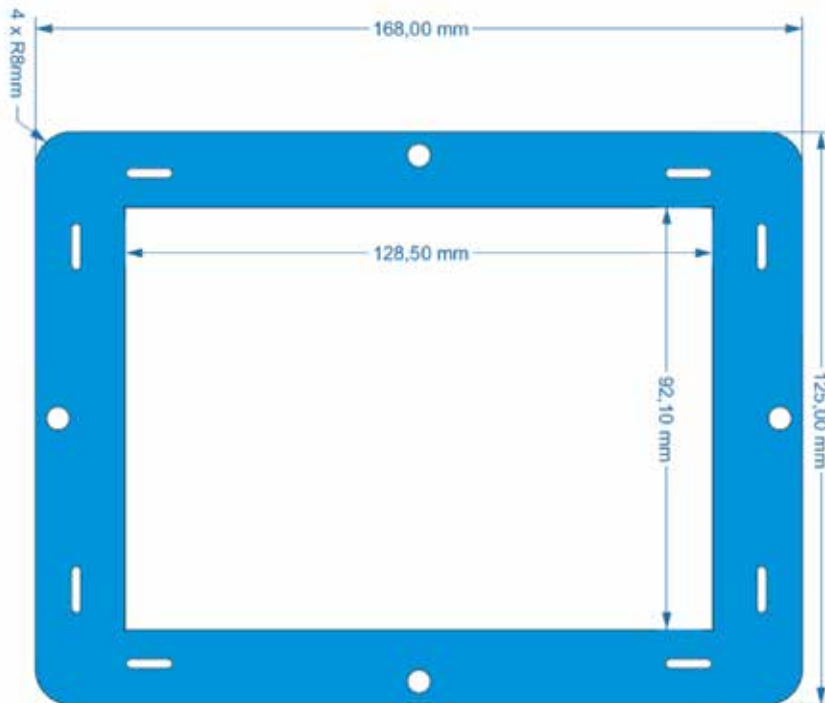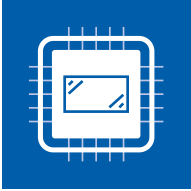MIPI CSI + I2C

Slot uSIM board

INSTALLATION

DTI offers several solutions for fixing LCDs by glass bonding and mechanical supports:

- Bonding on standard/customized glass with AIR BONDING or OPTICAL BONDING technology
- Direct bonding to panel
- Standard mechanical bracket
- Custom mechanical bracket

Cover Glass

OCR

Touch Sensor

OCR

LCM

SERVICES

## DTI provides the following services:

■ **Graphic development**	Customers can freely choose the option that best suits the application
■ **Firmware development**	We develop the hardware platform's firmware in a flexible, efficient, and optimized way
■ **Software development**	We develop software tailored to the various needs starting from the customer's technical specifications
■ **Hardware development**	Each platform can be easily adapted to the application needs
■ **Glass bonding**	Our technologies and accumulated know-how, allow the bonding of displays with glasses of any shape and size

IoT SOLUTIONS

DTI Advanced Connectivity

All DTI embedded products allow an easy and secure connection to the DCloud web platform through the DConnect modules.
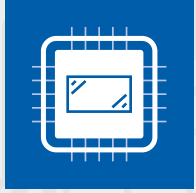
FUNCTIONS DESCRIPTION

Digital I/O

SPI/I2C

STM32 Microcontroller
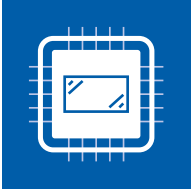
WIFI

RS485

USB2

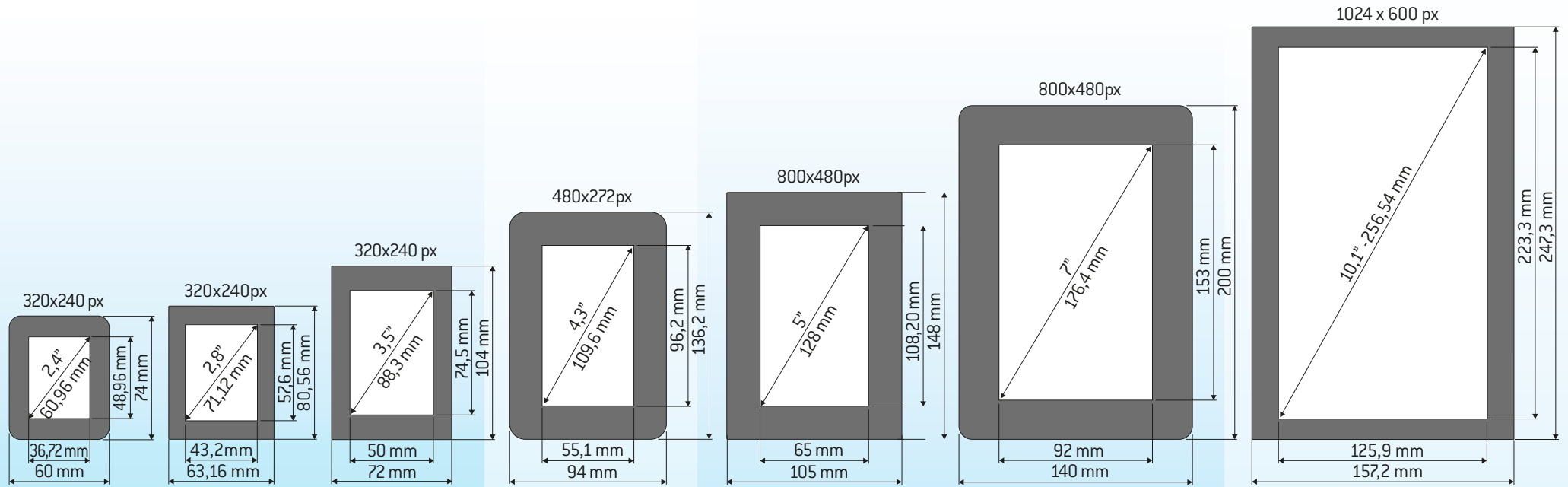LVDS-TTL 18 BIT

Micro SD

CAN

RS232

Audio

Ethernet

Android

Linux

DISPLAY FORMATS

320x240 px

2,4"
60,96 mm
48,96 mm
74 mm
36,72 mm
60 mm

320x240px

2,8"
71,12 mm
57,6 mm
80,56 mm
43,2mm
63,16 mm

320x240 px

3,5"
88,3 mm
74,5 mm
104 mm
50 mm
72 mm

480x272px

4,3"
109,6 mm
96,2 mm
136,2 mm
55,1 mm
94 mm

800x480px

5"
128 mm
108,20 mm
148 mm
65 mm
105 mm

800x480px

7"
176,4 mm
153 mm
200 mm
92 mm
140 mm

1024 x 600 px

10,1" -256,54 mm
223,3 mm
247,3 mm
125,9 mm
157,2 mm

DTouch-0

DTouch-1

DTouch-2

1366 x 768 px

1920 x 1080 px

194,5 mm
273 mm

15,6" -396,2 mm

21,5" - 546,1 mm

269,11 mm
350 mm

345,2 mm
424 mm

477,64 mm
559 mm

dti

WHERE
PASSION
MEETS
INNOVATION
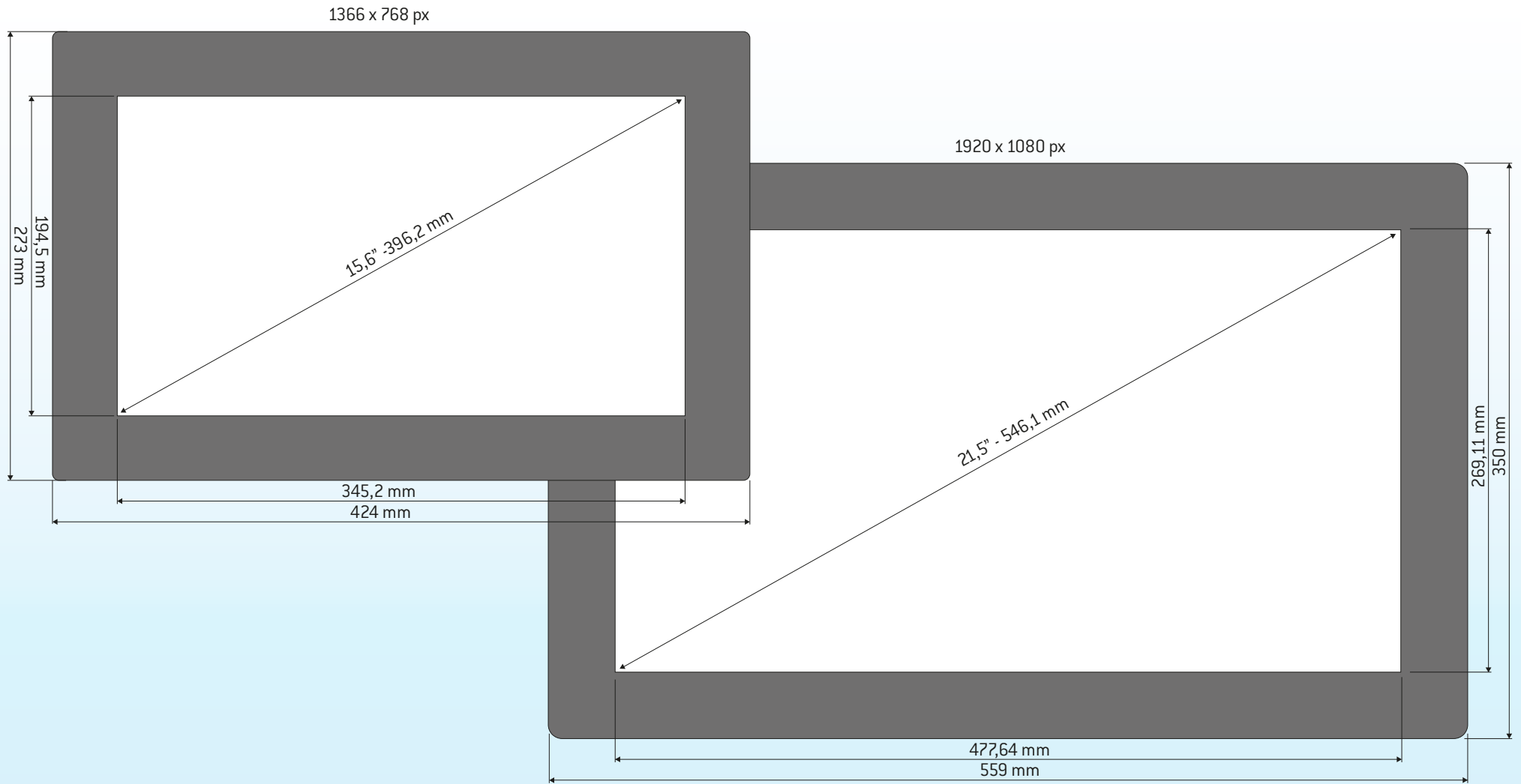
DTI Srl
- Via Palladio . 11
  I-33010 Tavagnacco . UD . Italy
- Tel: +39 0432 855071
- Fax: 0432 881848
- info@dtindustry.com
- www.dtindustry.com

www.dtindustry.com