AirHMI 10.1" ELEMENTARY SERIES

AIR1024X600S101_E

Overview

AirHMI is a Human Machine Interface （HMI） solution combining an onboard processor and memory touch display with AirHMI Editor software for HMI GUI project development. Using the AirHMI Editor software, you can quickly develop the HMI GUI by drag-and-drop components (button, label, image etc.) and C based instructions for coding how components interact at the display side. AirHMI HMI display connects to peripheral MCU via TTL Serial (5V, TX, RX ,GND) to provide event notifications that MCU can act on, the MCU can easily update progress and status back to AirHMI display utilizing instructions.

The Elementary Series supports TTL Serial and advanced software features and functions.

Package include:

*AirHMI AIR1024X600S101_E HMI Display
*2mm x 4P power and TTL UART cable
*Power supply board

AirHMI Models

AirHMI Type	Elementary Series
AirHMI Models	AIR1024X600S101_E (10.1 inch resistive touchscreen without enclosure)

Specifications

	Data	Description
Color	65K 65536 colors	16 bit 565, 5R-6G-5B
Layout size	258mm(L)×152mm(W)×6.4(H)	AIR1024X600S101_E
Module Size	235mm(L)×143mm(W)×5.2mm(H)	
Active Area (A.A.)	222.72mm(L)×125.28mm(W)	
Resolution	1024x600 pixel	Also can be set as 600x1024
Touch type	Resistive	
Touches	> 1 million	
Backlight	LED	
Backlight lifetime (Average)	>30,000 Hours	
Brightness	500nit	

Electronic Characteristics

	Test Conditions	Min	Typical	Max	Unit
Operating Voltage		4,65	5	6,5	V
Operating Current	VCC=+5V, Brightness is 100%	–	710	–	mA
Power supply recommend	5V, 1.0A, DC				

Working Environment & Reliability Parameter

	Test Conditions	Min	Typical	Max	Unit
Working Temperature	5V, Humidity 60%	-20	25	70	℃
Storage Temperature		-30	25	80	℃
Working Humidity	25°C	10%	60%	90%	RH

Interfaces Performance

	Test Conditions	Min	Typical	Max	Unit
Serial Port Baudrate	Standard	600	9600	115200	bps
Output High Voltage (TXD)	IOH=1mA	3.0	5.0	Vin	V
Output Low Voltage(TXD)	IOL=-1mA		0.1	0.2	V
Input High Voltage(RXD)		3.0	5.0	Vin	V
Input Low Voltage(RXD)		-0.7	0.0	1.3	V
Serial Port Mode	5.0V TTL (3.3V optional)				
Serial Port	4Pin_2.00mm				
USB interface	NO				
SD card socket	Yes (FAT32 format), support maximum 32G Micro SD Card				
	* presence of *.tft file on microSD: socket is exclusive to upgrade AirHMI firmware/HMI design				

Memory Features

Memory Type	Test Conditions	Size	Unit
FLASH Memory		16	MB
RAM Memory		32	MB