GE Service Manual

IC755CSS12CDB

1. Description

The IC755CSS12CDB is a QuickPanel+ device that is manufactured by Emerson Automation, formerly by GE Fanuc Automation. It features a Windows Compact Embedded (CE) version 7 operating system with 12-inch TFT colored display screen with resolution of 800 x 600. It has a multi-touch interface and Freescale i.MX535 1GHz processor with 1GB DDR3 SDRAM; 512MB SLC NAND Flash and 512KB Battery Backed SRAM. For communication, it is provided with Two (2) Ethernet interface, One (1) Serial port supporting R

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc Emerson**
Product	**Type Human Machine Interface (HMI)**
Product	**Line Quickpanel**
Part	**Number IC755CSS12CDB**
Weight	**6.94 lbs (3.15 kg)**
Description	**Operator Interface Terminal**
Screen	**12.3 inches**
Screen	**Type TFT**
Processor	**Freescale i.MX535 1GHz based on ARM Cortex A8**
Memory	**1 GB DRAM**
Display	**Size 12"**
Serial	**Ports 2**
Display	**Resolution 800 x 600 SVGA**
Resolution	**800 x 600 pixels**
Display	**Type Projected Capacitive Display**
Operating	**System Windows 7**
Operator	**Input Multi-touch**
Temperature	**0 to 55 degrees Celsius**
Integral	**Memory 1 GB SDRAM; 512 MB SLC NAND FLASH; 512 KB Battery Backed SDRAM**
Communication	**Interface Two (2) Ethernet interface; One (1) RS232; One (1) RS485;**
USB	**Ports 2x USB 2.0 (Type-A); 1x USB 2.0 (Mini Type-B)**
Operating	**System (OS) Windows CE Operating System version 7**
Power	**Supply 12 / 24 VDC**
Status	**Indicators Tri-color LED (Amber/Green/Red); On-board Buzzer**
Functionalities	**HMI; PLC; Process controller; Data Historian; Gateway**
Programming	**languages Ladder Diagram (**

3. Product Information

The IC755CSS12CDB is a QuickPanel+ device that is manufactured by Emerson Automation, formerly by GE Fanuc Automation. It features a Windows Compact Embedded (CE) version 7 operating system with 12-inch TFT colored display screen with resolution of 800 x 600. It has a multi-touch interface and Freescale i.MX535 1GHz processor with 1GB DDR3 SDRAM; 512MB SLC NAND Flash and 512KB Battery Backed SRAM. For communication, it is provided with Two (2) Ethernet interface, One (1) Serial port supporting RS232 and One (1) RS485 port. It is also provided with Three (3) USB Interfaces.

Technical specifications for IC755CSS12CDB

Manufacturer GE Fanuc Emerson

Product Type Human Machine Interface (HMI)

Product Line Quickpanel

Part Number IC755CSS12CDB

Weight 6.94 lbs (3.15 kg)

Description Operator Interface Terminal

Screen 12.3 inches

Screen Type TFT

Processor Freescale i.MX535 1GHz based on ARM Cortex A8

Memory 1 GB DRAM

Display Size 12"

Serial Ports 2

Display Resolution 800 x 600 SVGA

Resolution 800 x 600 pixels

Display Type Projected Capacitive Display

Operating System Windows 7

Operator Input Multi-touch

Temperature 0 to 55 degrees Celsius

Integral Memory 1 GB SDRAM; 512 MB SLC NAND FLASH; 512 KB Battery Backed SDRAM

Communication Interface Two (2) Ethernet interface; One (1) RS232; One (1) RS485;

USB Ports 2x USB 2.0 (Type-A); 1x USB 2.0 (Mini Type-B)

Operating System (OS) Windows CE Operating System version 7

Power Supply 12 / 24 VDC

Status Indicators Tri-color LED (Amber/Green/Red); On-board Buzzer

Functionalities HMI; PLC; Process controller; Data Historian; Gateway

Programming languages Ladder Diagram (LD); Function Block Diagram (FBD); Structured Text (ST); Instruction List (IL); Sequential Function Chart (SFC)

Bezel With manufacturer monogram

Description

The IC755CSS12CDB is a QuickPanel+ device that is currently manufactured by Emerson Automation. This product has compact assembly and able to function as a Human Machine Interface (HMI), a Programmable Logic Controller (PLC), a process controller, machine gateway and data historian. The IC755CSS12CDB is powered by an input supply voltage of 12-30 VDC with maximum power consumption of 30 Watts. It has a graphic display measuring 12 inches and resolution of 800 x 600 pixels with dedicated 2D / 3D graphics accelerator and NEON SIMD Media accelerator while the provided operator interface is a projected 2-point capacitive touch screen interface. The IC755CSS12CDB hosts a Microsoft Windows Compact Embedded (CE) version 7 Operating System (OS). It is equipped with an Freescale i.MX535 processor with clockspeed of 1GHz. This OS enables a variety of PC like function such as remote connectivity using VNC, web browser, intranet, SNMP, File Transfer Protocol (FTP) and HTTP. To function as a controller, the IC755CSS12CDB supports the defined programming language by IEC 61131-3 which are Ladder Diagram (LD), Function Block Diagram (FBD), Structured Text (ST), Instruction List (IL) and Sequential Function Chart (SFC). With the same database located within the same hardware, integration and communication is greatly simplified. The integrated memory of this operator interface is composed of 1GB DDR3 SDRAM; 512MB SLC NAND Flash and a 512KB Battery Backed SRAM. Communication interfaces available to this aligns to the current popular protocol which is Ethernet, having 2 Fast Ethernet ports that supports 10/100 mbps transmission speed. It also has 2 serial interfaces, 1 port being a dedicated RS232 interface while the other an RS485 communication port.

The IC755CSS12CDB terminal is a plug and play Quickpanel operator interface terminal manufactured by GE Fanuc. It has a screen size of 12.3 inches. It is used as a monitoring device for industrial automation applications. It is part of the GE Quickpanel series. The screen is a color TFT panel with a native resolution of 800 x 600 pixels. It uses 1 GB of memory for the DRAM. It is a highly efficient device and it features a serial port for faster communication. It supports RS 232 communication on COM 1 and RS 422, 485, and 232 communication on COM 2 for the local network. The IC755CSS12CDB terminal supports memory expansion by using the SDHC card. It has a compact form factor and it is only 13.27 inches in width, 10.35 inches in height, and 2.76 inches in depth. The operator panel consumes a total of 30 Watts of power during normal operation. The operating temperature should not exceed 55 degrees Celsius to avoid thermal deration. The IC755CSS12CDB terminal is a processor-based operator interface terminal. It comes with an ARM cortex A8 processor for all of the logical operations. This color terminal panel is also equipped with USB ports to connect peripheral devices. A single audio out port is also available in this terminal variant. The operator terminal is bundled with the Microsoft Windows 7 operating system for interfacing with the operators easily. The IC755CSS12CDB terminal meets all the industrial and environment compliance standards and is listed with the UL standard. The enclosure of the terminal is certified with an IP 65 protection rating. The interface terminal can be easily mounted by using a mounting gasket.