ANALOG WAY LIVECORE™

Module: MAIN

Crestron 3-series

Date: **January 03, 2017**
Driver version: **V3.01**
Compatible with: **LiveCore™ Firmware v4.00.x or above**

GENERAL

This module is the core module for controlling LiveCore™ series processors. It must be connected to any optional module used in your program. Even if you use only one optional module, the MAIN module (LiveCore_Main) must be included in the project. This module mainly provides inter-modules connectivity and synchronization, global TAKE feature, LiveCore™ processor information feedback as well as some remote control functions.

CONNECTION

You have to implement one Crestron TCP/IP client object in your project and connect it to the MAIN module.

IP address: LiveCore™ processor IP address
Default port: **10600**

Control

Main

From_device	String_in	To be connected to TCP-IP client RX$
To_device	String_out	To be connected to TCP-IP client TX$
Refresh_General_Statuts_PB	Digital_in	To be pulsed for initialization after each TCP_IP connection
Refresh_General_Statuts_In_Progress_FB	Digital_out	Module status refresh in progress
Refresh_Next_Module_OS	Digital_out	To be connected to next module for daisy chain initialization
Refresh_All_Modules_OS	Digital_out	Pulsed to indicate that a refresh of all modules is needed.

Inter_connect_screen_Modules

You can connect up to 8 optional SCREEN modules (LiveCore_Screen).

X is screen index (1=>8)

ScreenX_Available_FB	Digital_in	Screen validity (1 if valid)
From_Module_ScreenX	String_in	LiveCore_ScreenX module commands to LiveCore™ processor
Mess_Txt_From_Module_ScreenX	String_in	LiveCore_ScreenX module text status
To_Module_ScreenX	String_out	From TCP-IP client RX$ to LiveCore_ScreenX module

Inter_connect_screen_Preset_Modules

You can connect up to 8 PRESET optional modules (LiveCore_Preset).

X is the screen index (1=>8)

From_Module_ScreenX_Presets	String_in	Module_ScreenX_Presets module commands to LiveCore™ processor
Mess_Txt_From_Module_ScreenX_Presets	String_in	Module_ScreenX_Presets module status text
To_Module_ScreenX_Presets	String_out	From TCP-IP client RX$ to Module_ScreenX_Presets module

Inter_connect_Other_Modules

Optional modules connections. These connections are to be connected if corresponding optional modules are used.

From_Module_In	String_in	Module_In module commands to LiveCore™ processor
Mess_Txt_From_Module_In	String_in	Module_In module status text
To_Module_In	String_out	From TCP-IP client RX$ to Module_In module
From_Module_Frame_logo	String_in	Module_Frame_logo module commands to LiveCore™ processor
Mess_Txt_From_Module_Frame_logo	String_in	Module_Frame_logo module status text
To_Module_Frame_logo	String_out	From TCP-IP client RX$ to Module_Frame_logo module
From_Module_Presets_Filtering	String_in	Module_Presets_Filtering module commands to LiveCore™ processor
Mess_Txt_From_Module_Presets_Filtering	String_in	Module_Presets_Filtering module status text
To_Module_Presets_Filtering	String_out	From TCP-IP client RX$ to Module_Presets_Filtering module
From_Module_Master_Presets	String_in	Module_Master_Presets module commands to LiveCore™ processor
Mess_Txt_From_Module_Master_Presets	String_in	Module_Master_Presets module status text
To_Module_Master_Presets	String_out	From TCP-IP client RX$ to Module_Master_Presets module
Mess_Txt_From_Module_Snapshot	String_in	Module_Snapshot module status text
From_Module_Monitoring_Master	String_in	Module_Monitoring module commands to LiveCore™ processor (master device)
Mess_Txt_From_Module_ Monitoring_Master	String_in	Module_Monitoring module status text (master device)
To_Module_Monitoring_Master	String_out	From TCP-IP client RX$ to module LiveCore_Monitoring (master device)
From_Module_Monitoring_Slave	String_in	Module_Monitoring module commands to LiveCore™ processor (slave device)
Mess_Txt_From_Module_ Monitoring_Slave	String_in	Module_Monitoring module status text (slave device)
To_Module_Monitoring_Slave	String_out	From TCP-IP client RX$ to module LiveCore_Monitoring (slave device)
From_Module_GPIO	String_in	Module_GPIO module commands to LiveCore™ processor
Mess_Txt_From_Module_GPIO	String_in	Module_GPIO module status text
To_Module_GPIO	String_out	From TCP-IP client RX$ to module LiveCore_GPIO
From_Module_Confidence	String_in	Module_Confidence module commands to LiveCore™ processor
Mess_Txt_From_Module_ Confidence	String_in	Module_Confidence module status text
To_Module_ Confidence	String_out	From TCP-IP client RX$ to module LiveCore_ Confidence

General

X is the output number (1=>8)

Type_RQ_PB	Digital_in	Pulse for requesting LiveCore™ processor type
Cmd_Set_Ver_RQ_PB	Digital_in	Pulse for requesting LiveCore™ version
Updater_Ver_RQ_PB	Digital_in	Pulse for requesting LiveCore™ Updater version
Controlers_Count_RQ_PB	Digital_in	Pulse for requesting LiveCore™ connected controller count
Shutdown_PB	Digital_in	Pulse to shutdown LiveCore™ processor (manual restart only)
Sleep_PB	Digital_in	Pulse to shutdown LiveCore™ processor and enable Wake on LAN function. See program example as well as the Magic Packet module provided to see how to implement Wake on LAN function
Reboot_PB	Digital_in	Pulse to reboot LiveCore™ processor
User_Messages_TXT	String_out	User text messages (to be displayed)
Device_Type$	String_out	LiveCore™ processor type
Cmd_Set_Ver$	String_out	LiveCore™ processor version
Updater_Ver$	String_out	LiveCore™ processor Updater version
Build_Ver$	String_out	LiveCore™ processor TPP version
Controllers_Count_FB	Ana_out	Number of controllers connected to the LiveCore™ processor
NB_Screen_Available_FB	Ana_out	Number of valid screens. **To be sent to LiveCore_Master_Presets module**
OutputX_Name_FB	String_out	Ouptut X label (16 char. Max)
OutputX_HDCP_State_FB	Digital_in	HDCP status for output X
Status_Machine_FB	Ana_out	LiveCore™ processor global state. see table below for values

Global take

X is the screen number (1=>8)

Auto_Screen_List_Toggle	Digital_in	Enable or disable the automatic filling of the global screen list (when loading a Master Preset from memory)
List_Take_PB	Digital_in	Pulse for launch a global TAKE. This command uses the global screen list to determine which screens will be affected
ScreenX_Into_List_Toggle	Digital_in	Include screen X in the global screen list or exclude screen X from the global screen list
Auto_Screen_List_FB	Digital_out	1 if the automatic filling of the global screen list option is enabled (when loading a Master Preset from memory)
List_Take_FB	Digital_out	Global TAKE status. Remains at 1 until all the individual screen “TAKE” actions have been successfully completed.
ScreenX_Into_List_FB	Digital_out	1 if screen X is included into the global screen list

LiveCore™ global states

0	Unknown
1	Initializing
2	Recalling configuration
3	Linking to secondary LiveCore™ processor
4	Restoring factory settings
5	Updating firmware
255	Ready