

# CCPF StarterKit



## (Application Board)

R-Car Starter Kit extension for software development

CCPF Starter Kit is an extension board for R-Car Starter Kit Premier(H3) and R-Car Starter Kit Pro(M3) that made by Renesas Electronics Corporation. It uses Starter Kit Premier(H3) / R-Car Starter Kit Pro(M3) as the main control device and is controlled via COMEXPRESS. It is equipped with expansion interfaces such as M.2 PCI M-Key socket 2ch (compatible with SSD Socket type 2 and 3), USB3.0 1ch, USB2.0 1ch, CAN 2ch, Display 1ch, MIPI CSI 4-Lane 1ch and MIPI CSI 2-Lane 1ch.



CCPF StarterKit + R-Car Starter Kit



CCPF StarterKit board

### ◆ Specification

Starter Kit	<ul style="list-style-type: none"> <li>R-Car Starter Kit Premier(H3): v2.0+4GB DDR / v2.0+8GB DDR / v3.0+8GB DDR(Dual Rank) / v3.0+8GB DDR(Single Rank)</li> <li>R-Car Starter Kit Pro(M3): v1.0+2GB DDR / v3.0+8GB DDR</li> </ul>
Connectors	<ul style="list-style-type: none"> <li>CN1 COM Express type connector 440pin</li> <li>CN2 M.2 PCIe M-key SSD Card Socket ch0 (SSD,TPU compatible)</li> <li>CN3 M.2 PCIe M-key SSD Card Socket ch1 (SSD,TPU compatible)</li> <li>CN4 Display1 (R-Car Starter Kit Premier H3 only)</li> <li>CN5 USB 3.0</li> <li>CN6 USB 2.0</li> <li>CN7 CAN0/CAN1</li> <li>CN8 GPIO</li> <li>CN9 Main Power Supply input (12VDC or 24VDC)</li> <li>CN10 DEBUG SERIAL(for User)</li> <li>CN11 DEBUG SERIAL(for R-Car H3 StarterKit)</li> <li>CN12 Camera0 (MIPI CSI-2 4-Lane FPC Connector)</li> <li>CN13 Camera1 (MIPI CSI-2 2-Lane FPC Connector)</li> <li>CN14 RL78 DEBUG Connector</li> <li>CN15 FAN Connector</li> <li>CN16 PWRM Ext. Switch input</li> </ul>
Switches	<ul style="list-style-type: none"> <li>SW1 CAN0 Termination ON/OFF</li> <li>SW2 CAN1 Termination ON/OFF</li> <li>SW3 All power ON/OFF Toggle Switch</li> <li>SW4 PWRM Power ON Push Switch</li> <li>SW5 PWRM Power OFF Push Switch</li> <li>SW6 PWRM STANDBY Push Switch</li> <li>SW7 RL78 MODE Dip Switch</li> </ul>
Board	<ul style="list-style-type: none"> <li>Dimensions: 120mm × 97mm</li> <li>Board thickness: 1.6mm</li> <li>External power supply 12V/5A or 24V/2.5A</li> <li>Topr Operating ambient temperature Free Air room temperature 25deg ave.</li> <li>DCIN (+6~+30V)</li> </ul>

### ◆ Block Diagram

