Protection and Filters around MCUs

- SMAJ12A
- 3.3V: ESDZL5-1F4
- 5V: ESDALC6V1-1U2
- SPT01-335DEE
- Automation sensor
- IO-link
- HDMI control
- line protection
- HDMI05-CL02F3
- ESDCAN04-2BWY
- CAN
- SMAJ40CA
- ECMF4-40A100N10
- High speed differential
- HDMI 2.1, USB4, USB 3.2 Gen 2,
  MIPI, Display Port

- USBULC6-2M6
- ESDA7P120-1U1M
- ESDA14V2BP6
- ESDA6V1BC6
- RS-232
- RS-485
- I2C Bus:
  3.3V: ESDZL5-1F4
  5V: ESDALC6V1-1U2
- SWD & JTAG
- ESDALC6V1W5
- NFC
- EMI03-SIM02M8
- Motor control

- Source: TCPP02-M18
- DRP: TCPP03-M20
- Type C Port Protection
- ECMF2-40A100N6
- Sink: TCPP01-M12
- SD2.0: EMIF06-MSD02N16
- SD3.0: HSP051-4M10
- Memory
- Ethernet 1G secondary
- HSP051-4M10

- Motor control
- PLC inputs
- HDMI05-CL02F3
- ECMF4-40A100N10
- High speed differential
- HDMI 2.1, USB4, USB 3.2 Gen 2,
  MIPI, Display Port
- ECMF2-40A100N6
- Sink: TCPP01-M12
- DRP: TCPP03-M20
- Type C Port Protection
ST ESD protection and EMI filter devices ensure compliance with the most stringent requirements. Protection efficiency with low clamping voltage ($V_{CL}$). Protection transparency with low leakage current ($I_{RM}$). Signal integrity with ultralow capacitance and ultrawide bandwidth.

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<td>5V</td>
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Standard packaging options are available, as well as advanced options like single- and multiple-line, compact, flat and flow-through versions to optimize space constraints.