

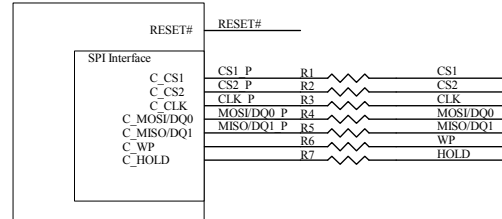
Reference schematic for Isolation Free In-Circuit-Programming Methodology

Isolation Free method is supported by DediProg SF600 programmer and protected by copy right

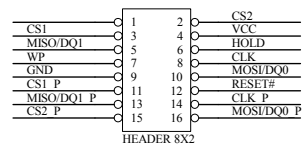
Benefits:

- Low cost method applicable on high volume production
- Code update flexibility: R&D development, Production lines, Warehouse, Field support ...

Application Controller



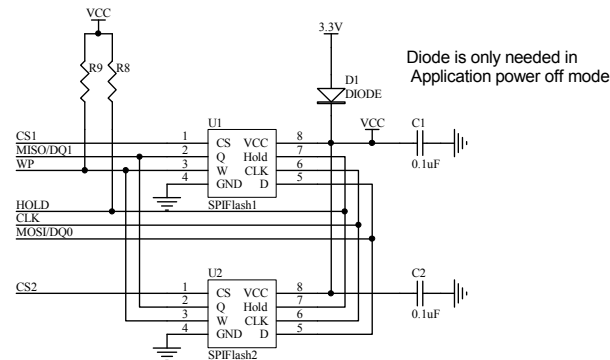
Programmer Header



HEADER 8X2

Pitch 2.54mm or 1.27mm

Dediprogram provide cable with both 2.54mm pitch and 1.27mm pitch. Refer to DediProg part number "ADP-SF600-ISLF-01"



Diode is only needed in Application power off mode

- 1) Update with Application not supplied: Isolation on Serial Flash Vcc is required (Diode or Mosfet) to avoid programmer Vcc leakage. Diode must be selected with low threshold drop. Application Reset is not required.
- 2) Update with Application supplied: Isolation on Serial Flash Vcc is not required but programmer Reset signal must reset the application controller to stabilize its outputs.
- 3) If application is using a single Serial Flash then CS2 and CS2_P can be left unconnected.
- 4) The signals XXX_P on the application controller side are also connected to the programmer to protect the controller against current leakage and prevent damages.
- 5) Serial resistors (R1-R7) are commonly used by application to filter the undershoot and overshoot during SPI transitions. This application resistors are also required as an isolation to ensure a good communication between programmer and flash. The resistor value selected will depend on the application frequency and bus capacitance to ensure proper transitions. Higher value resistor will reduce the current leakage and power consumption.

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