Carte SD et µSD

SPI Bus Mode

| MMC Pin | SD Pin | miniSD Pin | microSD Pin | Name | I/O | Logic | Description |
|------------|-----------|---------------|----------------|------------|-----|-------|--|
| 1 | 1 | 1 | 2 | nCS | 1 | PP | SPI Card Select [CS] (Negative Logic) |
| 2 | 2 | 2 | 3 | DI | 1 | PP | SPI Serial Data In [MOSI] |
| 3 | 3 | 3 | | VSS | S | S | Ground |
| 4 | 4 | 4 | 4 | VDD | S | S | Power |
| 5 | 5 | 5 | 5 | CLK | 1 | PP | SPI Serial Clock [SCLK] |
| 6 | 6 | 6 | 6 | VSS | S | S | Ground |
| 7 | 7 | 7 | 7 | DO | 0 | PP | SPI Serial Data Out [MISO] |
| | 8 | 8 | 8 | NC nlRQ | O | OD | Unused (memory cards) Interrupt (SDIO cards) (Negative Logic) |
| | 9 | 9 | 1 | NC | | | Unused |
| | | 10 | | NC | | | Reserved |
| | | 11 | | NC | | - | Reserved |

1 2 3 4 5 6 7 MMC 1 2 3 4 5 6 7 8 SD 9 1 2 3 0 1 4 5 6 7 8 miniSD 1 2 3 4 5 6 7 8 miniSD 1 2 3 4 5 6 7 8 micro SD

One-Bit SD Bus Mode

| MMC Pin | SD Pin | miniSD Pin | microSD Pin | Name | I/O | Logic | Description |
|------------|-----------|---------------|----------------|------------|-----|-----------|--|
| 1 | 1 | 1 | 2 | NC | | | Unused |
| 2 | 2 | 2 | 3 | CMD | I/O | PP, OD | Command, Response |
| 3 | 3 | 3 | | VSS | S | S | Ground |
| 4 | 4 | 4 | 4 | VDD | S | S | Power |
| 5 | 5 | 5 | 5 | CLK | 1 | PP | Serial Clock |
| 6 | 6 | 6 | 6 | VSS | S | S | Ground |
| 7 | 7 | 7 | 7 | DAT0 | I/O | PP | SD Serial Data 0 |
| | 8 | 8 | 8 | NC nlRQ | O | OD | Unused (memory cards) Interrupt (SDIO cards) (Negative Logic) |
| | 9 | 9 | 1 | NC | | - | Unused |
| | | 10 | | NC | | | Reserved |
| | | 11 | | NC | | - | Reserved |

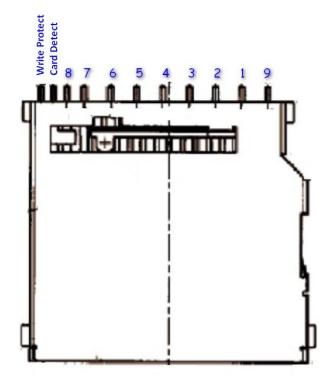
- 1. Direction is relative to card. I = Input, O = Output.
- 2. PP = Push-Pull logic, OD = Open-Drain logic.
- 3. S = Power Supply, NC = Not Connected (or logical high).

Four-Bit SD Bus Mode

| MMC Pin | SD Pin | | microSD Pin | Name | I/O | Logic | Description |
|------------|-----------|----|----------------|--------------|----------|-----------|---|
| - | 1 | 1 | 2 | DAT3 | I/O | PP | SD Serial Data 3 |
| | 2 | 2 | 3 | CMD | I/O | PP, OD | Command, Response |
| | 3 | 3 | | VSS | S | S | Ground |
| - | 4 | 4 | 4 | VDD | S | S | Power |
| | 5 | 5 | 5 | CLK | 1 | PP | Serial Clock |
| | 6 | 6 | 6 | VSS | S | S | Ground |
| | 7 | 7 | 7 | DAT0 | I/O | PP | SD Serial Data 0 |
| | 8 | 8 | 8 | DAT1 nIRQ | I/O O | PP OD | SD Serial Data 1 (memory cards) Interrupt Period (SDIO cards share pin via protocol) |
| | 9 | 9 | 1 | DAT2 | I/O | PP | SD Serial Data 2 |
| | | 10 | | NC | | | Reserved |
| | | 11 | | NC | | - | Reserved |

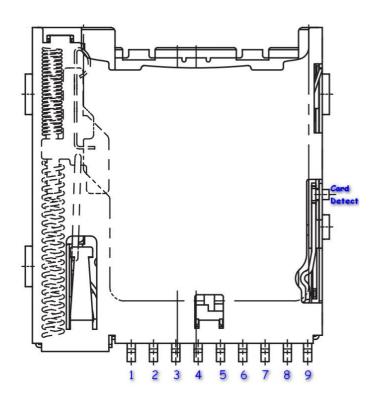
$\underline{\text{Connecteur Carte SD et } \mu \text{SD}}$

Connecteur Carte SD:



| Pin | Signal |
|-----|-------------|
| 1 | CD / DATA 3 |
| 2 | CMD / D1 |
| 3 | VSS (GND) |
| 4 | VDD |
| 5 | CLK / SCLK |
| 6 | VSS (GND) |
| 7 | DATA 0 |
| 8 | DATA 1 |
| 9 | DATA 2 |

Connecteur Carte µSD :



| Signal |
|------------|
| DATA 2 |
| DATA 3 |
| CMD |
| VDD |
| CLK / SCLK |
| VSS (GND) |
| DATA 0 |
| DATA 1 |
| COM / GND |
| |