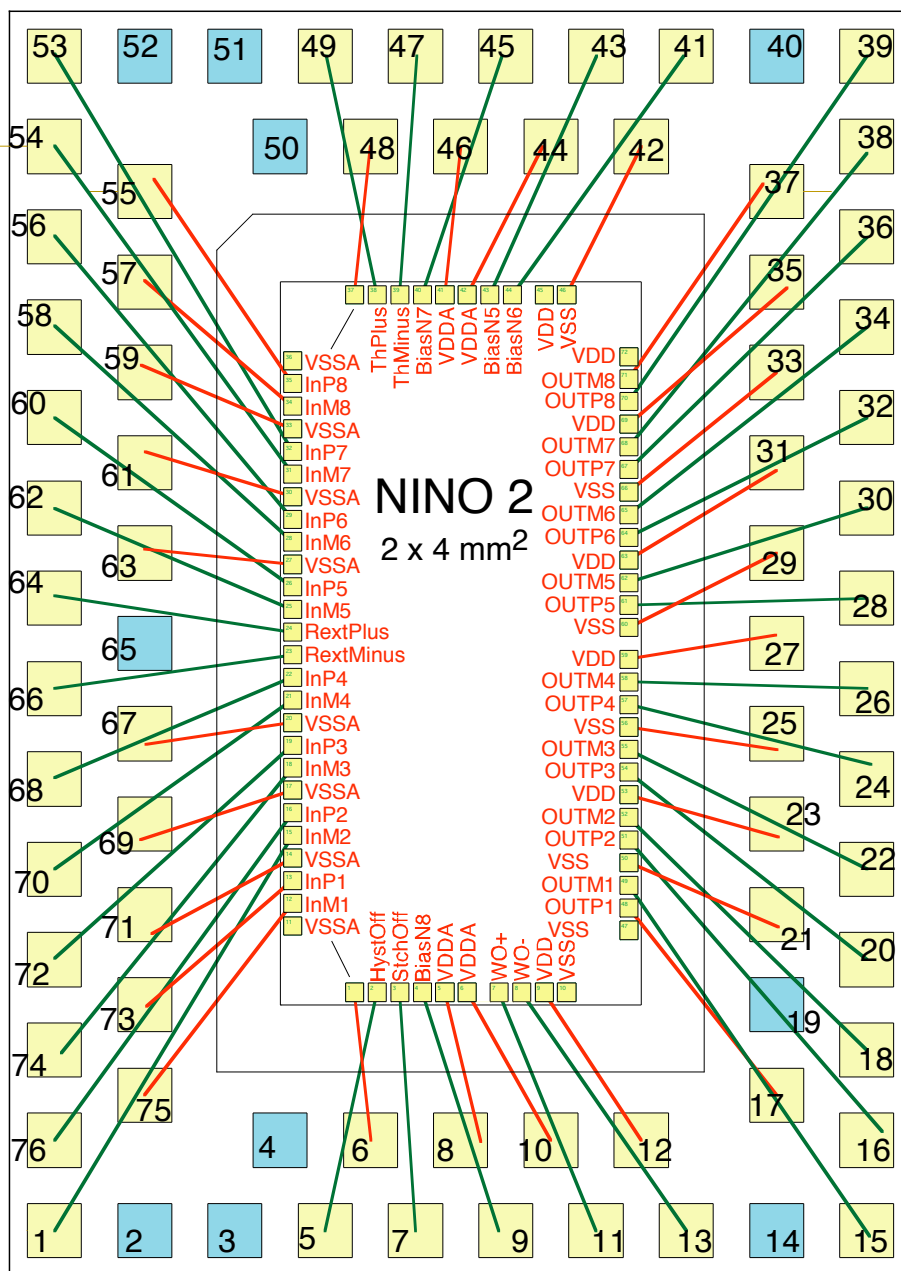


ASIC Description

Power supply :	0V-2.5V
Consumption current :	160 mA
Total number of pins:	76 pins
Unidirectional input Number :	16 pins
Unidirectional output Number :	18 pins
Unused pins :	7 pins
0V (VSS):	12 pins
2.5 V (VDD)	9 pins



N.B. The reference dot on the package is in the top left hand corner – corresponding to pin 53 (not to pin 1).

1. Description of the pin functions

InP1, InM1, ... , In M8. Differential signal input

OUTM1, OUTP1, ... , OUTP8. LVDS output driver.

WO+, WO- : LVDS output signal that is the OR of all 8 channels

HystOff (pin 5) switches on (connect to +2.5V via 100 k Ω) and off (connect to 0V) the built in hysteresis of the discriminator.

StchOff (pin 7) switches on (connect to +2.5V via 100 k Ω) and off (connect to 0V) the stretcher built into the output pulse of the discriminator.

BiasN8 (pin 9) Sets the amount of time that is added to the output width (stretch time) : 1.25 V corresponds to 10 ns.

BiasN6 (pin 41) A resistor connected from VDD to this bias point sets the output current in LVDS output driver: 200 Ω for 5mA; 150 Ω for 6 mA (maximum).

BiasN5 (pin 43) This is a test point and should be left floating.

BiasN7 (pin 45) This controls the amount of hysteresis (0V corresponds to no hysteresis)

ThPlus and **ThMinus** (pins 49 and 47) These set the threshold: this is a differential voltage that can have a common value between 0.5 V and 2.0 V. The difference in this voltage sets the threshold (100 mV = 25 fC).

RextPlus and **RextMinus** – the value of a resistor between these two points sets the input impedance. Rext of 20 Ω corresponds to an input impedance of 40 Ω (minimum value). Rext of 35 Ω corresponds to 70 Ω input impedance.