Wat moet er getest worden?

Analoge output:

Wat testen: hoe testen

* Non-linearity: ADC, 0mA, 35mA

Digital inputs:

Wat testen: hoe testen

* Schmitt trigger Threshholds: DAC
* INPUT 1 (Counter 1: pulse & freq counter): pulsegenerator (PWM/kloksignaal)
* INPUT 2, 3, 4, 5 (COUNTER 2, 3, 4, 5: Counter & pulse width): pulsegenerator (PWM/kloksignaal)
* INPUT 9 (DI line of SPI): microcontroller

Digital OUTPUTS:

Wat testen: hoe testen

* Group 1
  + Non-linearity: ADC, 0mA, 25mA
* Group 2,3
  + Non-linearity: ADC, 0mA, 35mA
* Group 4:
  + Non-linearity: ADC, 0mA, 480mA
* Group 5 & 6
  + Current limiting resistor & ADC
* 2 PWM output:
  + Output voltage: ADC & filter
  + Output frequency: frequency counter
  + Duty cycle: Pulse width counter
  + Counter (number of pulses)
* I2C interface
  + I2C communication: microcontroller slave / EEPROM
  + Output voltage: ADC
* Serial channel:
  + UART interface
    - UART communication: microcontroller
    - Output voltage:
  + RS485 interface
    - RS485: microcontroller, 485->232 converter
* SPI interface:
  + SPI communication: microcontroller/IC
* CAN interface:
  + 2-wire CAN communication: microcontroller/IC

Power supplies:

Wat testen: hoe testen

* Programmable power supplies
  + Spanning: ADC
  + Max power consumption: stroommeter & load (0mA, 5mA, 100mA, 1000mA, 1800mA, 3000mA)
* Fixed voltage power supply 27V
  + Spanning: ADC
  + Max power consumption: stroommeter & load (0mA, 950mA)
* Fixed voltage power supply 5V
  + Spanning: ADC
  + Max power consumption: stroommeter & load (0mA, 480mA)

USB:

Wat testen: hoe testen

* USB communicatie: microcontroller

Ethernet:

Wat testen: hoe testen

Ethernet communicatie:

Analog inputs:

Wat testen: hoe testen