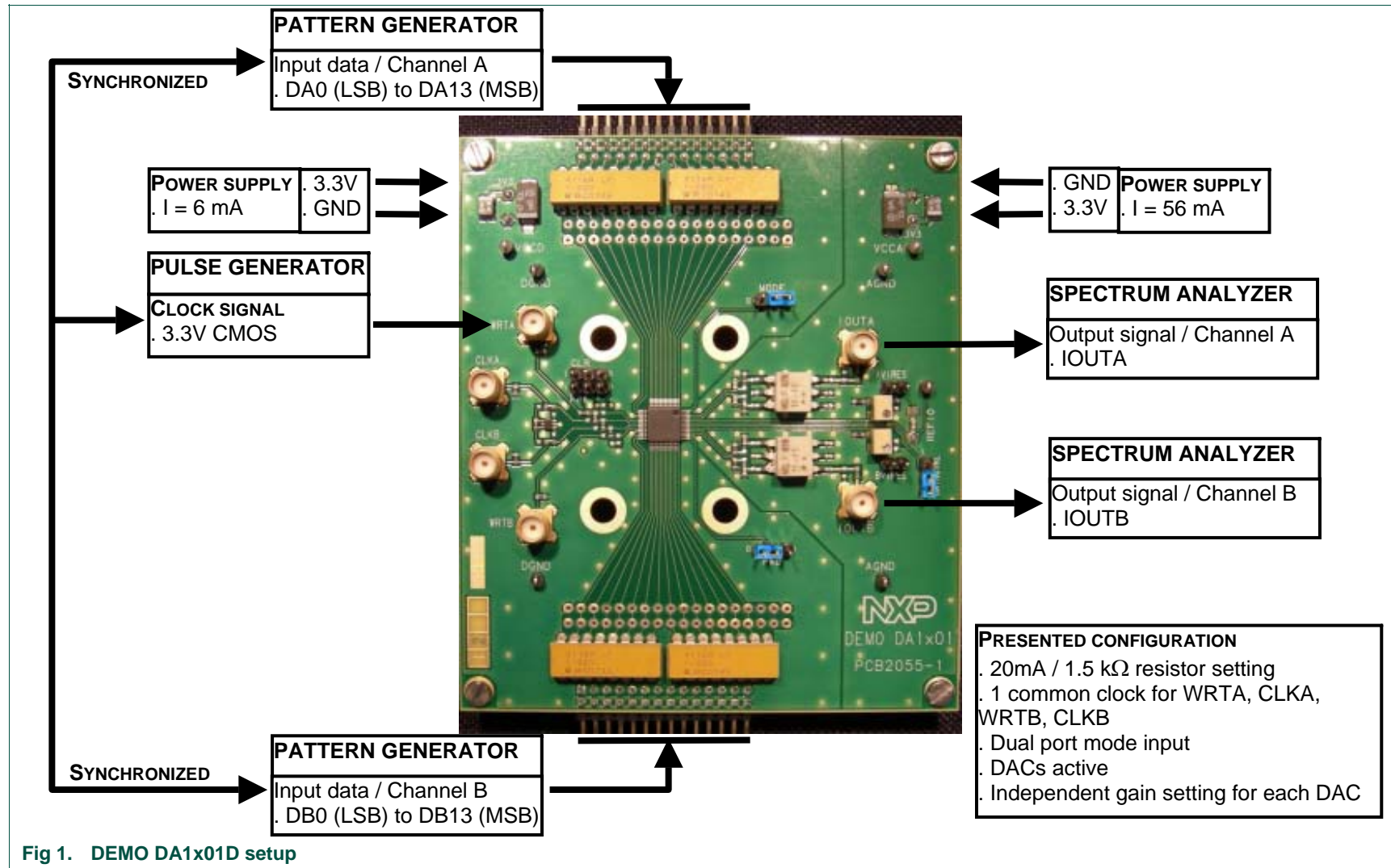


1. Quick start

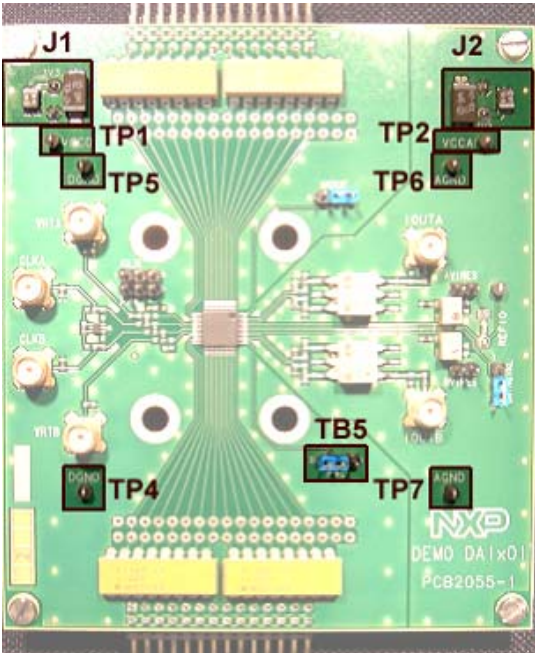

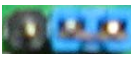
1.1 Setup overview

Figure Fig.1 presents the connections to measure DEMO DA1x01D.



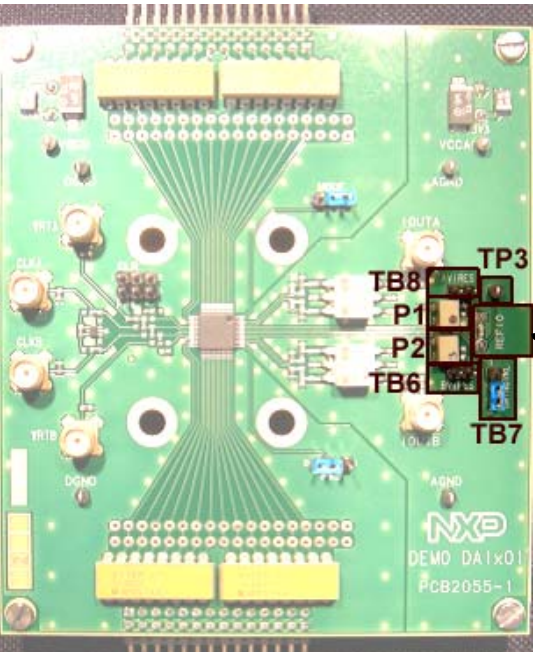
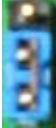
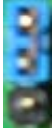
1.2 Power supply

Table 1. General power supply

Name	Function	View
J1	VDDD connector – Digital power supply 3.3 V _{DC} / 6 mA.	
J2	VDDA connector – Analog power supply 3.3 V _{DC} / 56 mA	
TP1	VDDD test point – Digital power supply	
TP2	VDDA test point – Analog power supply	
TP4, TP5	DGND test point – Digital ground	
TP6, TP7	AGND test point – Analog ground	
TB5	PWD switch – Power down selection	
	 	
	DACs active	Power down

1.3 Output current and gain adjustments

Table 2. Output current and gain adjustments

Name	Function	View	
P1	AVIRES trimmer – Channel A full-scale current setting		
TB8	AVIRES test point – Channel A resistor test point (1.5 kΩ for 20 mA)		
P2	BVIRES trimmer – Channel B full-scale current setting		
TB6	BVIRES test point – Channel B resistor test point (1.5 kΩ for 20 mA)		
TB7	GAINCTRL switch – Gain control selection		
	2 independent resistors for full-scale current setting of both channels 		1 common resistor (P1) for full-scale current setting of both channels 
J3	REFIO connector – External input for reference adjustment		
TP3	REFIO test point – Reference I/O (typ. 1.25 V)		

1.4 Input/output datas

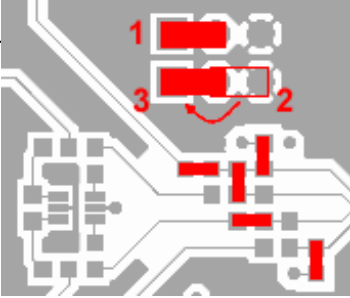
Table 3. Input/output datas

Name	Function	View	
TB1	Array connector – Channel A digital inputl (DA0 to DA13)		
J9	IOUTA connector – Channel A analog output signal (100 Ω differential resitor)		
TB2	Array connector – Channel B digital inputl (DB0 to DB13)		
J8	IOUTA connector – Channel B analog output signal (100 Ω differBntial resitor)		
TB9	MODE switch – Mode selection		
	Interleaved data input	Dual-port data input	

1.5 Clock signals

Table 4. Clock signals

Name	Function	View
J4	WRTA connector – Write A input	
J5	CLKA connector – Clock A input	
J6	WRTB connector – Write B input	
J7	CLKB connector – Clock B input	
net	Dual-port mode: 1 common clock (WRTA) for WRTA, CLKA, WRTB and CLKB	
	Dual-port mode: 4 clock inputs for WRTA, CLKA, WRTB and CLKB	
	Dual-port mode: 1 common clock (CLKA) with 2 buffers for WRTA, CLKA, WRTB and CLKB	

Name	Function	View
	<p data-bbox="236 203 432 230">Interleaved mode:</p> <ul data-bbox="236 237 501 539" style="list-style-type: none"><li data-bbox="236 237 501 293">- WRTA input for IQWRT and IQCLK<li data-bbox="236 300 501 356">- CLKB input for IQRESET<li data-bbox="236 362 501 427">- IQSEL is generated by the 74LCX112M<ol data-bbox="268 434 437 539" style="list-style-type: none"><li data-bbox="268 434 437 461">1. Put CLR to 1<li data-bbox="268 468 437 495">2. Put PRE to 0<li data-bbox="268 501 437 528">3. Put PRE to 1	 A circuit diagram showing a 74LCX112M decoder and its connections to a memory array. The decoder is a 3-to-8 line decoder with three inputs (A, B, C) and eight outputs (Y0-Y7). Red boxes and arrows indicate the control signals: 1. CLR (Clear) is connected to the A input; 2. PRE (Pulse Enable) is connected to the B input; 3. WRTA (Write Address) is connected to the C input. The decoder's outputs are connected to the memory array.

2. Example

2.1 Setup example

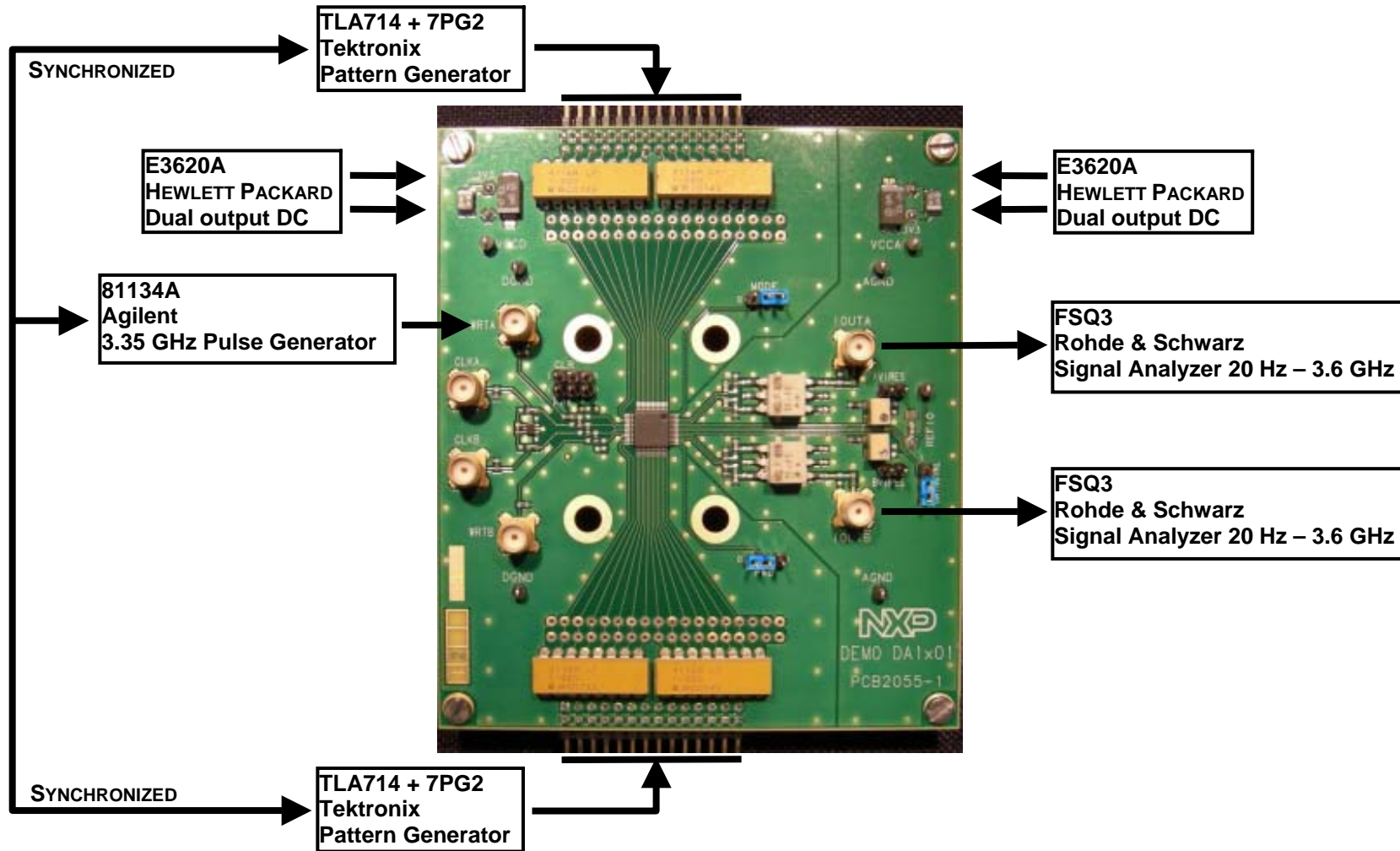


Fig 2. DAC1401D125 hardware setup