USB-CTRL-DDSPA

USB CONTROLLER FOR DDSPA

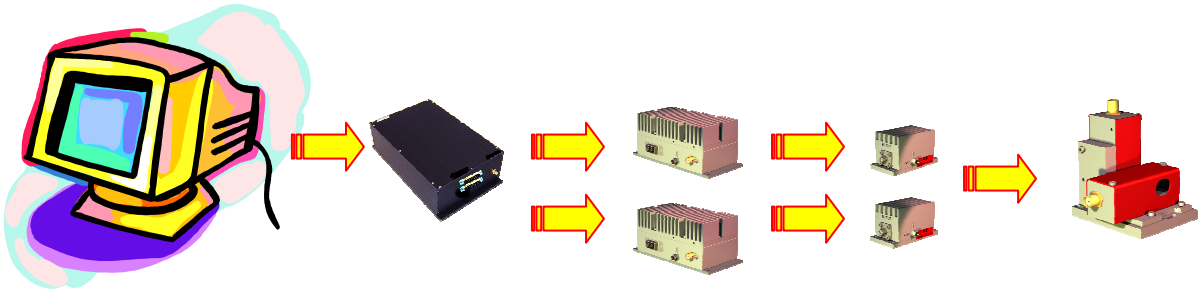
• 15 to 31 bits • USB 2.0 interface • Can control 1 or 2 DDSPA

AA propose an external USB controller suitable to drive high resolution Direct Digital Synthesizers. Its USB 2.0 interface will allow user a fast and easy set up to drive one axis or two axis synthesizers for variable frequency shifters, one axis deflectors or two axis deflectors.
This USB controller is compatible with the 15, 23 and 31 bits DDSPA drivers.

Parameter	Rating	Conditions
Compatible with	1 or 2 DDSPA simultaneously 15 to 31 bits	
Power supply	Through USB connection	
Frequency control	USB protocole (1 or 2 x 15 to 31 bits)	
Amplitude control	USB protocole (8 bits AM versions only)	
USB protocole	Fast USB 2.0	
Input connectors	USB-B / 2 x SMA (Analog MOD IN)	
Output connectors	2 x HD44 female (connection to DDS)	
Access time / Response time	Limited by USB communication (< 1 ms)	
Size	L 150 x l 82 x h 30 mm	
Operating Temperature	10 to 40 °C	

USB PROTOCOLE		
DDSPA 15 bits + Analog	**DDSPA 23 bits + Analog**	**DDSPA 31 bits + Analog**
« :LnGffff » + CR	*« :LnGffffff » + CR*	*« :LnGfffffff »+ CR*
DDSPA 15 bits + 8 bits (AM)	**DDSPA 23 bits + 8 bits (AM)**	**DDSPA 31 bits + 8 bits (AM)**
« :LnGfffffPpp » + CR	*« :LnGffffffPpp » + CR*	*« :LnGfffffffPpp » + CR*

- ***Ln*** = DDS number (0 or 1)
- ***Gffff, Gffffff, Gfffffff*** = frequency code (Hexadecimal)
  15 bits 'G0000' = 0Hz, 'G7FFF'=500MHz
  23 bits 'G000000' = 0Hz, 'G7FFFFF'=500MHz
  31 bits 'G00000000' = 0Hz, 'G7FFFFFFF'=500MHz
- ***Ppp*** = Power code (8 bits versions)
  'P00' pour Pmin, 'PFF' pour PMax



Computer *USB Controller* *DDS* *Amplifier* *AO device*

AA Sa 18, rue Nicolas Appert F-91898 ORSAY - Tel : +33 (0)1 76 91 50 12 – Fax : +33 (0)1 76 91 50 31 – www.aaoptoelectronic.com