

Functional Range of the Core Devices

feature	52/XD Cores				52/XC Cores			52/XS Cores			
	52-7440 / 52-7441 / 52-7442				52-7400	52-7402	52-7403	52-1801		52-1804	
	1x DSP Module 52-7460	2x DSP Module 52-7460	3x DSP Module 52-7460	4x DSP Module 52-7460				Standard SXConfig	XS Core with extended feature upgrade licence 52-1950	Standard SXConfig	XS Core with extended feature upgrade licence 52-1950
fader processing ⁽¹⁾	24	48	64	64	24	20	16	16		4	
fader layers ⁽¹⁾	yes				yes	no	no	no	no	no	no
fader channels	250				150			predefined	150	predefined	150
output functions	120				120	80	40	predefined	40	predefined	40
super output functions	18				18	18	SW option ⁽²⁾ : 18	0	SW option ⁽²⁾ : 18	0	SW option ⁽²⁾ : 18
logic functions	200				200	80	40	predefined	40	predefined	40
summing busses (stereo) (PGM+Aux+CF ⁽³⁾ +PFL)	48				32	24	16	11 (predefined: 2x PGM, 2x Aux, 6x CF, 1x PFL)	16	11 (predefined: 2x PGM, 2x Aux, 6x CF, 1x PFL)	16
mix minus busses (stereo) (within the limit of max. number of summing busses)	30				16	12	6	6			
PFL busses (stereo) (within the limit of max. number of summing busses)	4x 2 (2 for each virtual mixer)				4x 2 (2 for each virtual mixer)	2	1	1			
summing bus format 5.1 support	SW option ⁽²⁾				SW option ⁽²⁾			not available	SW option ⁽²⁾	not available	SW option ⁽²⁾
summing bus signal types: Voice and Music	SW option ⁽²⁾				SW option ⁽²⁾			not available	SW option ⁽²⁾	not available	SW option ⁽²⁾
delay ⁽⁴⁾	SW option ⁽²⁾ : delay functions of 1 sec or 10 sec available for fader and fix processing				48 delay functions of 1 sec or 10 sec available for fader and fix processing, a total of max. 170 seconds, a total of max. 48 stereo channels			SW option ⁽²⁾ : 1 sec. / fader	SW option ⁽²⁾ : 48 delay functions of 1 sec or 10 sec available for fader and fix processing, a total of max. 170 seconds, a total of max. 48 stereo channels	SW option ⁽²⁾ : 1 sec. / fader	SW option ⁽²⁾ : 48 delay functions of 1 sec or 10 sec available for fader and fix processing, a total of max. 170 seconds, a total of max. 48 stereo channels
	max. 170 seconds, max. 48 stereo channels	max. 340 seconds, max. 96 stereo channels	max. 510 seconds, max. 144 stereo channels	max. 680 seconds, max. 192 stereo channels							
virtual keys	100				100	40	0	0			
clock logics	yes				yes	0	0	0			
selector logics	yes				yes	10	0	0			
level detects	24				20	10	5	5 predefined	5	5 predefined	5
Loudness Meter (EBU R128) (within the limit of max. number of level detects)	SW option ⁽²⁾ : 5	SW option ⁽²⁾ : 10	SW option ⁽²⁾ : 15	SW option ⁽²⁾ : 20	SW option ⁽²⁾ : 5			no	SW option ⁽²⁾ : 5	no	SW option ⁽²⁾ : 5
logic delay	20				20	10	5	0	5	0	5
scripts	100				100	10	0	0			
(virtual) mixer per DSP frame	4				4	1	1	1			
processing the talkback matrix	yes				SW option ⁽⁵⁾	SW option ⁽⁵⁾	no	no			
member of talkback matrix	yes				SW option ⁽⁵⁾			SW option ⁽⁵⁾			
global resources	yes				SW option ⁽⁵⁾			SW option ⁽⁵⁾			
global logics (global logic exchange with DHD devices)	yes				SW option ⁽⁵⁾			SW option ⁽⁵⁾			
networking (direct logic exchange with DHD devices)	yes				SW option ⁽⁵⁾			SW option ⁽⁵⁾			
serial ports	2 (each: RS232 or RS422)				1 (RS232)			1 (RS232)			
MADI slots	HW option ⁽⁶⁾ : 2				HW option ⁽⁶⁾ : 1			HW option ⁽⁶⁾ : 1			
APC ports	8				12			8 (max. 3 can be used for I/O modules)	8	4 (max. 3 can be used for I/O modules)	4

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Gigabit Audio cages	52-7440: 12 52-7441: 8 52-7442: 4				2			52-1801A: 0 (Gigabit Audio not possible) 52-1801B or later hardware revisions: 1		52-1804A: 0 (Gigabit Audio not possible) 52-1804B or later hardware revisions: 1	
Connection of Concentrator (52-7301/52-7300) on GA cages	yes				yes			no	yes	no	yes
APC Device interlink (multi-channel audio connection with XC/XD/XS cores via APC port), 48/48 ch, bidirectional	SW option ⁽⁷⁾				SW option ⁽⁷⁾			SW option ⁽⁷⁾			
GA Device interlink (multi-channel audio connection with XC/XD/XS cores via GA port), 512/512 ch, bidirectional	HW option ⁽⁸⁾				HW option ⁽⁸⁾			HW option ⁽⁸⁾			
usage of 52/MX or 52/RX control modules	yes				yes			no	yes	no	yes
usage of 52/SX control modules	yes				yes			yes	yes	yes	yes
usage of 52/DX control module	yes				yes			no	yes	yes	yes
pushbutton functions	configurable				configurable			predefined	configurable	predefined	configurable
customisable TFT views	yes				yes			predefined	yes	predefined	yes
Toolbox5 configuration capability	yes				yes			no	yes	no	yes
sync input	BNC: Wordclock, AES11, PAL, NTSC, HD Tri-Level HW option ⁽⁶⁾⁽⁸⁾ : MADI, GA SW option ⁽⁷⁾ : APC				BNC: Wordclock, AES11, PAL, NTSC HW option ⁽⁶⁾⁽⁸⁾ : MADI, GA SW option ⁽⁷⁾ : APC			BNC: Wordclock, AES11 HW option ⁽⁶⁾⁽⁸⁾ : MADI, GA SW option ⁽⁷⁾ : APC			

All values are maximum values, availability depends on number and type of used features. Please ask DHD support for more information.

(1) The assignment of fader processings to layers works in the following way:

- Up to 24 "DSP" faders, 4 layers, with 7400 XC core
- 24 "physical" Faders (no layers)
- 12 "physical" Faders each with 2 Layers
- 8 "physical" Faders each with 3 Layers
- 6 "physical" Faders each with 4 Layers

- Up to 64 "DSP" faders, 4 layers, with 744x XD core, and at least 3 DSP cards (52-7460)
- 64 "physical" Faders (no layers)
- 32 "physical" Faders each with 2 Layers
- 21 "physical" Faders each with 3 Layers
- 16 "physical" Faders each with 4 Layers

Motorfaders are required when working with Layers.

(2) additional licence required: 52-8581 - Enhanced DSP Processing

(3) CF: Clean Feed, mix minus bus, n-1 bus

(4) Internal DSP processing is always stereo. Therefore the maximum number of mono delays is equal to the maximum number of stereo channels. The right channel is unused in case of mono processing.

(5) additional licence required: 52-8583 - XC/XS Core Control Networking

(6) MADI submodul (52-1821 or 52-1825) required for each slot

(7) additional licence required: 52-8582 - XC/XS Core Audio Network

(8) XC Gigabit Audio port (52-7391 or 52-7395) required