

feature	52/XD Cores				52/XC2 Cores					52/XS2 Cores			
	52-7440 / 52-7441 / 52-7442 with 52-7456 XD2 controller				52-7420		52-7410			52-1810		52-1830	
	4x DSP Module 52-7460	3x DSP Module 52-7460	2x DSP Module 52-7460	1x DSP Module 52-7460	1 additional DSP Module 52-7460	no additional DSP module	Gold upgrade requires 52-8584 and 52-8585 license	Silver upgrade requires 52-8585 license	basic system	52-1810 with extended feature upgrade license 52-1950	Standard SXConfig	52-1830 with extended feature upgrade license 52-1950	Standard SXConfig/DXConfig
fader processing ⁽¹⁾	64	64	48	24	44	24	24	20	16	16		8	
fader layers ⁽¹⁾	yes				yes		yes	no	no	no	no	no	no
fader channels	250				250	150	150			150	predefined	150	predefined
output functions	120				120		120	80	40	40	predefined	40	predefined
super output functions	18				18		18		SW option ⁽²⁾ : 18	SW option ⁽²⁾ : 18	0	SW option ⁽²⁾ : 18	0
logic functions	200				200		200	80	40	40	predefined	40	predefined
summing busses (stereo) (PGM+Aux+CF ⁽³⁾ +PFL)	48				40	32	32	24	16	16	11 (predefined: 2x PGM, 2x Aux, 6x CF, 1x PFL)	16	11 (predefined: 2x PGM, 2x Aux, 6x CF, 1x PFL)
mix minus busses (stereo) (within the limit of max. number of summing busses)	30				24	16	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)		4x 2 (2 for each virtual mixer)	2x 2 (2 for each virtual mixer)	1	1			
summing bus format 5.1 support	SW option ⁽²⁾				SW option ⁽²⁾		SW option ⁽²⁾			SW option ⁽²⁾	not available	SW option ⁽²⁾	not available
summing bus signal types: Voice and Music	SW option ⁽²⁾				SW option ⁽²⁾		SW option ⁽²⁾			SW option ⁽²⁾	not available	SW option ⁽²⁾	not available
delay ⁽⁴⁾	SW option ⁽²⁾ : delay functions of 1 sec or 10 sec available for fader and fix processing				SW option ⁽²⁾ : delay functions of 1 sec or 10 sec available for fader and fix processing		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⁾ : 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
	max. 680 seconds, max. 192 stereo channels	max. 510 seconds, max. 144 stereo channels	max. 340 seconds, max. 96 stereo channels	max. 170 seconds, max. 48 stereo channels	max. 340 seconds, max. 96 stereo channels	max. 170 seconds, max. 48 stereo channels							
virtual keys	100				100		100	40	5	0			
clock logics	yes				yes		yes	0	0	0			
selector logics	yes				yes		yes	10	0	0			
level detects	48				24	20	20	10	5	5	5 predefined	5	5 predefined
Loudness Meter (EBU R128) (within the limit of max. number of level detects)	SW option ⁽²⁾ : 20	SW option ⁽²⁾ : 15	SW option ⁽²⁾ : 10	SW option ⁽²⁾ : 5	SW option ⁽²⁾ : 10	SW option ⁽²⁾ : 5	SW option ⁽²⁾ : 5			SW option ⁽²⁾ : 5	no	SW option ⁽²⁾ : 5	no
logic delay	20				20		20	10	5	5	0	5	0
scripts	100				100		100	10	0	0			
(virtual) mixer per DSP frame	4				4		4	2	1	1			
processing the talkback matrix	yes				SW option ⁽⁵⁾		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)			

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	4x DSP Module 52-7460	3x DSP Module 52-7460	2x DSP Module 52-7460	1x DSP Module 52-7460	1 additional DSP Module 52-7460	no additional DSP module	Gold upgrade requires 52-8584 and 52-8585 license	Silver upgrade requires 52-8585 license	basic system	52-1810 with extended feature upgrade license 52-1950	Standard SXConfig	52-1830 with extended feature upgrade license 52-1950	Standard SXConfig/DXConfig
Gigabit Audio / MADI SFP cages	SFP cages only for Gigabit Audio: 52-7440: 12 52-7441: 8 52-7442: 4				HW option ⁽⁹⁾ : 4		HW option ⁽⁹⁾ : 2			HW option ⁽⁹⁾ : 2			
MADI slots	HW option ⁽⁶⁾ : 2				0		0			0			
Connection of Concentrator (52-7310, 52-7301, 52-7300) to GA SFP cages	yes				yes		yes			yes	no	yes	no
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⁾			HW option ⁽⁸⁾			
APC ports	8				12		12			8	8 (max. 3 can be used for I/O modules)	4	4 (max. 3 can be used for I/O modules)
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⁾			SW option ⁽⁷⁾			
Extension Port for Dante Brooklyn module	no				yes		yes			yes			
usage of 52/MX or 52/RX control modules	yes				yes		yes			yes	no	yes	no
usage of 52/SX control modules	yes				yes		yes			yes	yes	yes	yes
usage of 52/DX control module	yes				yes		yes			yes	no	yes	yes
usage of 52/TX control module	yes				yes		yes			yes	no	yes	no
pushbutton functions	configurable				configurable		configurable			configurable	predefined	configurable	predefined
customisable TFT views	yes				yes		yes			yes	predefined	yes	predefined
Toolbox configuration capability	yes				yes		yes			yes	no	yes	no
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, HD Tri-Level Ethernet: Dante HW option ⁽⁶⁾⁽⁸⁾ : MADI, GA SW option ⁽⁷⁾ : APC		BNC: Wordclock, AES11 Ethernet: Dante HW option ⁽⁶⁾⁽⁸⁾ : MADI, GA SW option ⁽⁷⁾ : APC			BNC: Wordclock, AES11 Ethernet: Dante 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 52-7410 (feature level 3), 52-7420 XC2 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
 Motorfaders are required when working with Layers.

Up to 44 "DSP" faders, 4 layers, with 52-7420 XC2 core and additional DSP card (52-7460)
 44 "physical" Faders (no layers)
 22 "physical" Faders each with 2 Layers
 14 "physical" Faders each with 3 Layers
 11 "physical" Faders each with 4 Layers

Up to 64 "DSP" faders, 4 layers, with 52-744x 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

(2) additional license 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 license required: 52-8583 - XC/XS Core Control Networking

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

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

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

(9) GA/MADI SFP cages on XC2/XS2 Cores can be used with:

- 52-7321/52-7325 MADI SFP modules (include DHD license code) or
- 52-7391/52-7395 XC Gigabit Audio port (include DHD license code) for Core-to-Core connections or
- to connect Concentrators / MADI Concentrators with their included SFP modules (no DHD license code)