

Red colors is missing/diferent at Analog Devices documentation or does not match Sigma Studio Capture Output window

Orange colors is a little bit diferent, almost doesnt mather

Green colors matches Sigma Studio Capture window

A0 value does not appears on Capture Output window, Its calculted only!

Parametric EQ						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0,5		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost / 40)}$	A0	1,008247	Calculated only	$1 + (Alpha / Ax)$
Omega	0,008247	$(2 * PI * F0) / Fs$	B2	1,749190	01 BF CA E7	$(1 - (Alpha * Ax)) * Gain$
Sin	0,008247	$SIN(Omega)$	B1	-3,527349	FC 78 FF A4	$-(2 * Cos) * Gain$
Cos	0,999966	$COS(Omega)$	B0	1,778279	01 C7 3D 51	$(1 + (Alpha * Ax)) * Gain$
Alpha	0,008247	$Sin / (2 * Quality)$	A2	-0,983642	FF 04 30 0F	$-(1 - (Alpha / Ax)) / A0$
Gain	1,763735	$10^{(Gain / 20)} / A0$	A1	1,983574	01 FB CB 86	$(2 * Cos) / A0$

Low Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0,5		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost / 40)}$	A0	1,008247	Calculated only	$1 + (Alpha / Ax)$
Omega	0,008247	$(2 * PI * Freq) / Fs$	B2	0,000030	00 00 01 F7	$((1 - Cos) * Gain) / 2$
Sin	0,008247	$SIN(Omega)$	B1	0,000060	00 00 03 EE	$(1 - Cos) * Gain$
Cos	0,999966	$COS(Omega)$	B0	0,000030	00 00 01 F7	$(1 - Cos) * (Gain / 2)$
Alpha	0,008247	$Sin / (2 * Quality)$	A2	-0,991753	FF 02 1C 73	$1 - Alpha$
Gain	1,763735	$10^{(Gain / 20)} / A0$	A1	1,999932	01 FF FB 8B	$-2 * Cos$

High Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0,5		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost/40)}$	A0	1,008247	Calculated only	$1 + (Alpha / Ax)$
Omega	0,008247	$(2 * PI * Freq) / Fs$	B2	1,763705	01 C3 82 25	$((1 + Cos) * Gain) / 2$
Sin	0,008247	$SIN(Omega)$	B1	-3,527409	FC 78 FB B5	$-((1 + C33) * C35)$
Cos	0,999966	$COS(Omega)$	B0	1,763705	01 C3 82 25	$((1 + Cos) * Gain) / 2$
Alpha	0,008247	$Sin / (2 * Quality)$	A2	-0,991753	FF 02 1C 73	$1 - Alpha$
Gain	1,763735	$10^{(Gain / 20)} / A0$	A1	1,999932	01 FF FB 8B	$-2 * Cos$

Butterworth Low Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost/40)}$	A0	1,002916	Calculated only	$1 + Alpha$
Omega	0,008247	$(2 * PI * Freq) / Fs$	B2	0,000030	00 00 01 F9	$((1 - Cos) * Gain) / 2$
Sin	0,008247	$SIN(Omega)$	B1	-0,000060	FF FF FC 0D	$-((1 + C33) * C35$
Cos	0,999966	$COS(Omega)$	B0	0,000030	00 00 01 F9	$((1 - Cos) * Gain) / 2$
Alpha	0,002916	$(Sin / 2) * (1 / SQRT(2))$	A2	-0,997084	FF 00 BF 14	$-1(1 - Alpha)$
Gain	1,773110	$10^{(Gain / 20)} / A0$	A1	1,999932	01 FF FB 8B	$2 * Cos$

Butterworth High Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost/40)}$	A0	1,002916	Calculated only	$1 + Alpha$
Omega	0,008247	$(2 * PI * Freq) / Fs$	B2	1,773080	01 C5 E8 8A	$((1 + Cos) * Gain) / 2$
Sin	0,008247	$SIN(Omega)$	B1	-3,546159	FC 74 2E EB	$-((1 + C33) * C35$
Cos	0,999966	$COS(Omega)$	B0	1,773080	01 C5 E8 8A	$((1 - Cos) * Gain) / 2$
Alpha	0,002916	$(Sin / 2) * (1 / SQRT(2))$	A2	-0,997084	FF 00 BF 14	$-1(1 - Alpha)$
Gain	1,773110	$10^{(Gain / 20)} / A0$	A1	1,999932	01 FF FB 8B	$2 * Cos$

Bessel Low Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality		Boost (-15 to 15)	
48000	63	5	0		0	
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1,000000	$10^{(Boost/40)}$	A0	1,002381	Calculated only	$1 + Alpha$
Omega	0,008247	$(2 * PI * Freq) / Fs$	B2	0,000030	00 00 01 FB	$((1 - Cos) * Gain) / 2$
Sin	0,008247	$SIN(Omega)$	B1	0,000060	00 00 03 F6	$((1 - C33) * C35$
Cos	0,999966	$COS(Omega)$	B0	0,000030	00 00 01 FB	$((1 - Cos) * Gain) / 2$
Alpha	0,002381	$(Sin / 2) * (1 / SQRT(3))$	A2	-0,997619	FF 00 9C 04	$-1(1 - Alpha)$
Gain	1,778279	$10^{(Gain / 20)}$	A1	1,999932	01 FF FB 8B	$2 * Cos$

Bessel High Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality	Boost (-15 to 15)		
48000	63	5	0	0		
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1	$10^{(Boost/40)}$	A0	1,00238063864972	Calculated only	1 + Alpha
Omega	0,00824668071567	$(2 * PI * Freq) / Fs$	B2	1,77824917601807	01 C7 3B 56	$((1 + Cos) * Gain) / 2$
Sin	0,00824677419156	$SIN(Omega)$	B1	-3,55649835203614	FC 71 89 53	$-((1 + C33) * C35$
Cos	0,99996599632130	$COS(Omega)$	B0	1,77824917601807	01 C7 3B 56	$((1 - Cos) * Gain) / 2$
Alpha	0,00238063864972	$(Sin / 2.0) * (1 / SQRT(3))$	A2	-0,99761936135028	FF 00 9C 05	$-1(1 - Alpha)$
Gain	1,77827941003892	$10^{(Gain / 20)}$	A1	1,99993199264259	01 FF FB 8B	2 * Cos

Decompiled Low Pass						
Fs Hz	Freq Hz	Gain (-10 to 10)	Quality	Boost (-15 to 15)		
48000	35	1	0,5	0		
Calculated			IIR Coefficient Values, checked at Capture Output window			
Ax	1	POWER(10, Boost/40)	A0	1,004581473	Calculated only	1 + Alpha
Omega	0,004581489	(2 * PI * Freq) / Fs	B2	5,91477E-06	00 00 00 63	((1 + Cos) * Gain) / 2
Sin	0,004581473	SIN(Omega)	B1	1,18295E-05	00 00 00 C6	-((1 + C33) * C35
Cos	0,999989505	COS(Omega)	B0	5,91477E-06	00 00 00 63	((1 - Cos) * Gain) / 2
Alpha	0,004581473	Sin / (2 * Quality)	A2	-0,990878842	FF 02 55 C4	-1(1 - Alpha)
Gain	1,122018454	POWER(10, Gain / 20)	A1	1,990857948	01 FD A8 DD	2 * Cos