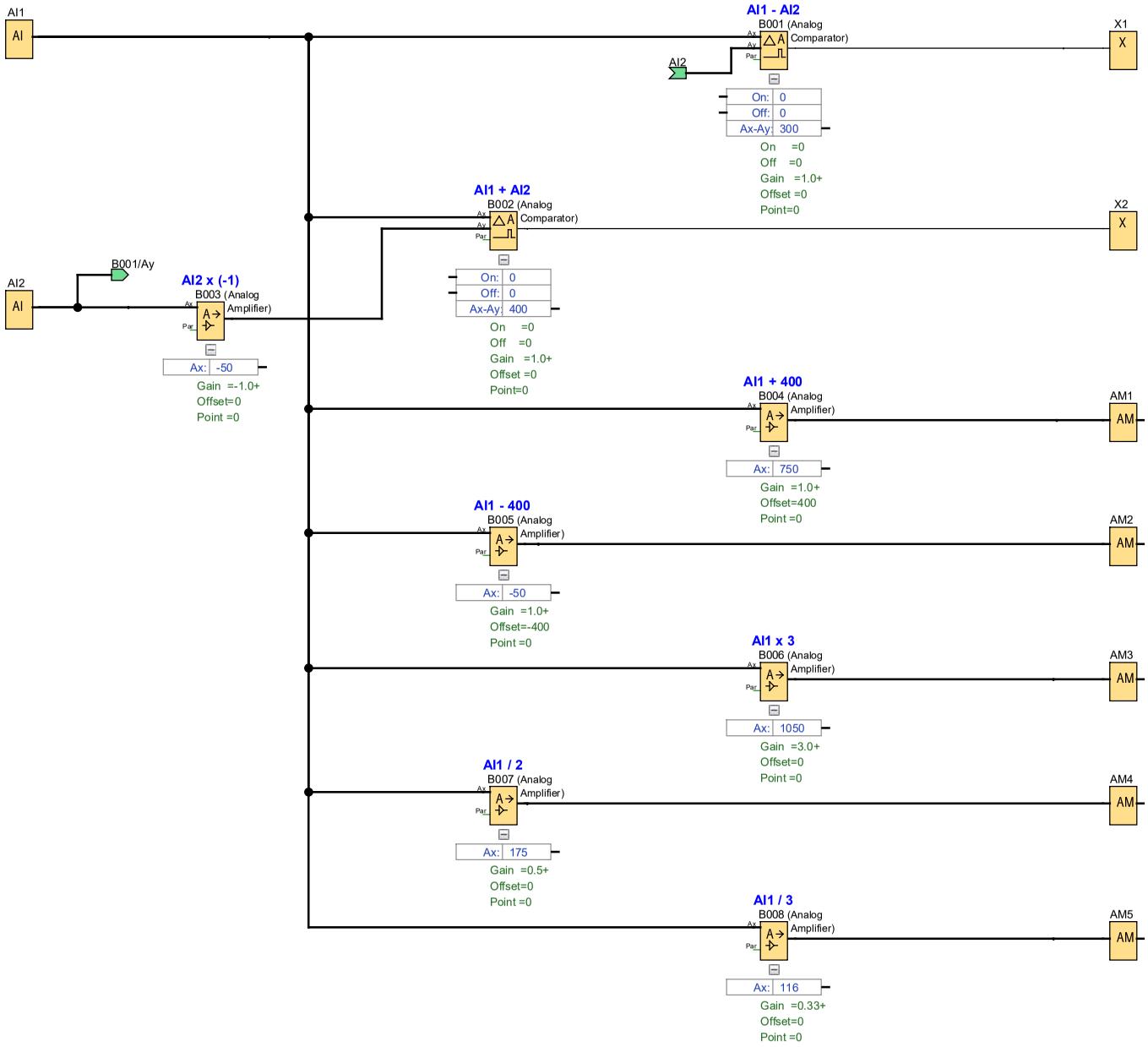
Basic arithmetic operations with LOGO!

The following examples shall show you how simple calculations (+ , - , x , /) are possible with LOGO! .
You are able to adapt these calculations to your requirements and also (for e.g.) form the sum of two counter values.
They can be used in other parts of your application or also to display them to a display.

Analog values:
- B001 subtracts the value of AI2 from AI1 [AI1 - AI2]
- B002 sums the values of AI1 & AI2 [AI1 + AI2]
- B003 multiplies AI2 value by -1 (makes value negative) [AI2 x (-1)]
- B004 adds 400 to AI1 value [AI1 + 400]
- B005 subtracts 400 from AI1 value [AI1 - 400]
- B006 multiplies AI1 by 3 [AI1 x 3]
- B007 divides AI1 by 2 [AI1 / 2]
- B008 divides AI1 by 3 [AI1 / 3]

Digital values:
- B009 counts UP with trigger from input 1 [references to B011]
- B010 counts UP with trigger from input 2 [references to B012]
- B014 adds the 2 counter values [C1 + C2 & references to B015]
- B016 multiplies the added counter values by 10 [(C1 + C2) x 10]

Analog values



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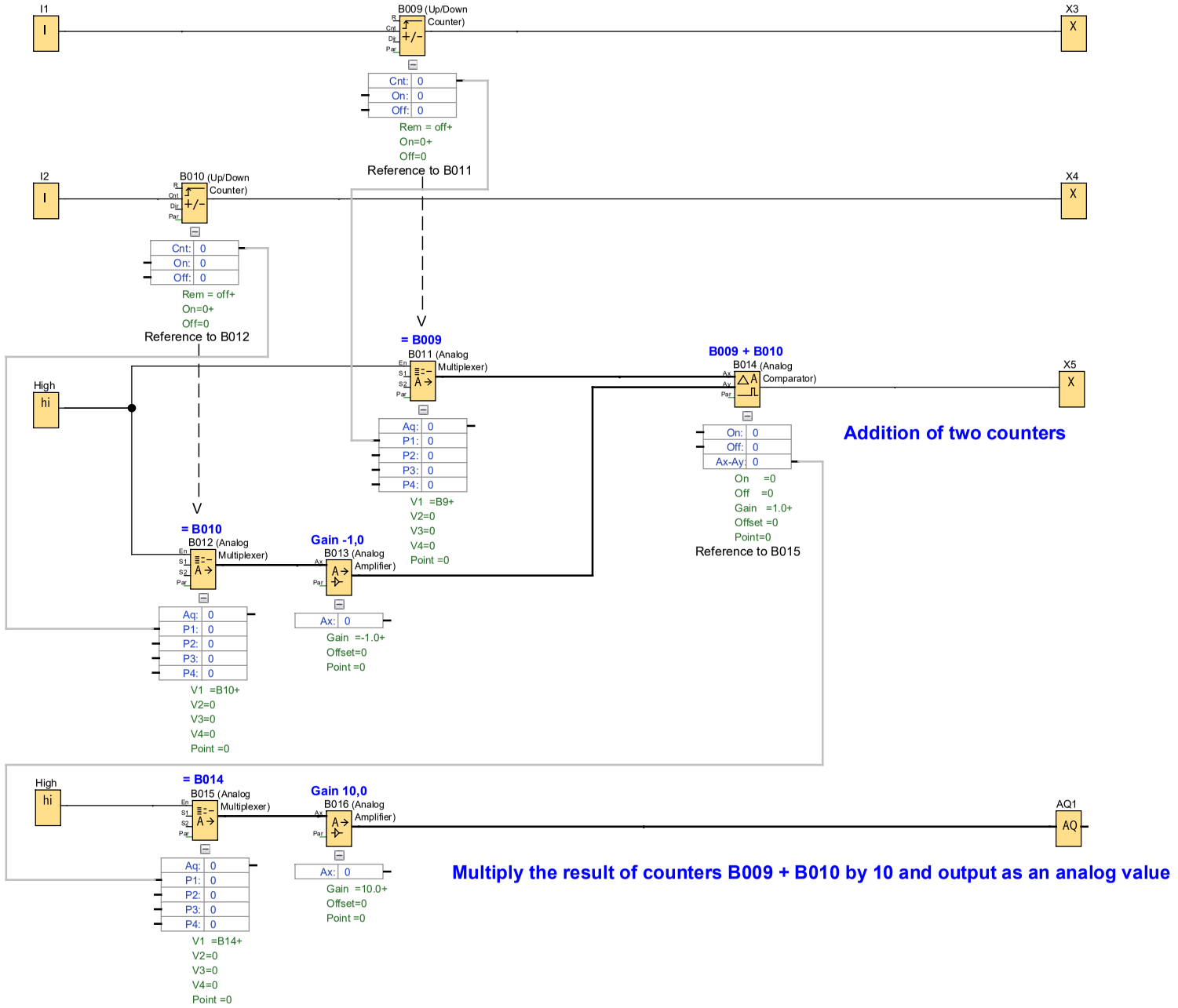
Date:	10/26/06 10:42 AM/7/30/25 2:41 PM		File:	basic_arithmetic_operations_FBD.lsc	Page:	2 / 6

Digital values



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Block Number (Type)	Parameter
B001(Analog Comparator) : (Analog Comparator)	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B002(Analog Comparator) : (Analog Comparator)	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B003(Analog Amplifier) : (Analog Amplifier)	Gain =-1.0+ Offset=0 Point =0
B004(Analog Amplifier) : (Analog Amplifier)	Gain =1.0+ Offset=400 Point =0
B005(Analog Amplifier) : (Analog Amplifier)	Gain =1.0+ Offset=-400 Point =0
B006(Analog Amplifier) : (Analog Amplifier)	Gain =3.0+ Offset=0 Point =0
B007(Analog Amplifier) : (Analog Amplifier)	Gain =0.5+ Offset=0 Point =0
B008(Analog Amplifier) : (Analog Amplifier)	Gain =0.33+ Offset=0 Point =0
B009(Up/Down counter) : (Up/Down Counter)	Rem = off On=0+ Off=0 Start=0
B010(Up/Down counter) : (Up/Down Counter)	Rem = off On=0+ Off=0 Start=0
B011(Analog MUX) : (Analog Multiplexer)	V1 =B9+ V2=0 V3=0 V4=0 Point =0
B012(Analog MUX) : (Analog Multiplexer)	V1 =B10+ V2=0 V3=0 V4=0 Point =0
B013(Analog Amplifier) : (Analog Amplifier)	Gain =-1.0+ Offset=0 Point =0

Block Number (Type)	Parameter
B014(Analog Comparator) : (Analog Comparator)	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B015(Analog MUX) : (Analog Multiplexer)	V1 =B14+ V2=0 V3=0 V4=0 Point =0
B016(Analog Amplifier) : (Analog Amplifier)	Gain =10.0+ Offset=0 Point =0

Connection	Label
AI1	
AI2	
I1	
I2	
AM1	
AM2	
AM3	
AM4	
AM5	
AQ1	
X1	
X2	
X3	
X4	
X5	