

```

<Qucs Schematic 0.0.16>
<Properties>
  <View=-57,11,545,512,1,0,0>
  <Grid=10,10,1>
  <DataSet=fa.dat>
  <DataDisplay=fa.dpl>
  <OpenDisplay=1>
  <Script=fa.m>
  <RunScript=0>
  <showFrame=0>
  <FrameText0=Title>
  <FrameText1=Drawn By:>
  <FrameText2=Date:>
  <FrameText3=Revision:>
</Properties>
<Symbol>
  <Line -20 -70 130 0 #000080 2 1>
  <Line -20 70 130 0 #000080 2 1>
  <Line -20 -70 0 140 #000080 2 1>
  <Line -50 0 30 0 #000080 2 1>
  <Line 110 -70 0 140 #000080 2 1>
  <.PortSym 20 -100 1 0>
  <Line 20 -70 0 -30 #000080 2 1>
  <Line 80 -70 0 -30 #000080 2 1>
  <.PortSym 80 -100 2 0>
  <.PortSym -50 0 5 0>
  <Line 110 0 20 0 #000080 2 1>
  <.PortSym 130 0 3 180>
  <Line 50 100 0 -30 #000080 2 1>
  <.PortSym 50 100 4 180>
  <.ID -90 74 FA>
  <Text 10 -60 12 #000000 0 "A">
  <Text 70 -60 12 #000000 0 "B">
  <Text 90 -10 12 #000000 0 "Ci">
  <Text -10 -10 12 #000000 0 "Co">
  <Text 50 50 12 #000000 0 "S">
  <Text 30 -10 20 #aa007f 0 "FA">
</Symbol>
<Components>
  <XOR Y2 1 350 130 -26 27 0 0 "2" 0 "1 V" 0 "0" 0 "10" 0 "old" 0>
  <AND Y4 1 220 310 -26 27 0 0 "2" 0 "1 V" 0 "0" 0 "10" 0 "old" 0>
  <OR Y5 1 360 260 -26 27 0 0 "2" 0 "1 V" 0 "0" 0 "10" 0 "old" 0>
  <AND Y3 1 230 220 -26 27 0 0 "2" 0 "1 V" 0 "0" 0 "10" 0 "old" 0>
  <XOR Y1 1 160 110 -26 27 0 0 "2" 0 "1 V" 0 "0" 0 "10" 0 "old" 0>
  <Port A 1 20 70 -23 12 0 0 "1" 1 "in" 0>
  <Port B 1 20 170 -23 12 0 0 "2" 1 "in" 0>
  <Port Ci 1 10 330 -23 12 0 0 "3" 1 "in" 0>
  <Port S 1 420 160 4 12 1 2 "4" 1 "out" 0>
  <Port Co 1 440 290 4 12 1 2 "5" 1 "out" 0>
</Components>
<Wires>
  <50 70 50 100 "" 0 0 0 "">
  <50 100 90 100 "A" 110 70 26 "">
  <50 120 50 170 "B" 80 120 27 "">
  <50 120 110 120 "" 0 0 0 "">
  <90 100 90 300 "" 0 0 0 "">
  <190 300 200 300 "" 0 0 0 "">
  <90 300 190 300 "" 0 0 0 "">
  <110 120 130 120 "" 0 0 0 "">
  <110 120 110 320 "" 0 0 0 "">
  <190 320 200 320 "" 0 0 0 "">
  <110 320 190 320 "" 0 0 0 "">
  <330 270 340 270 "" 0 0 0 "">
  <50 230 150 230 "" 0 0 0 "">
  <260 250 330 250 "" 0 0 0 "">
  <260 220 260 250 "" 0 0 0 "">
  <130 120 140 120 "" 0 0 0 "">

```

```
<90 100 130 100 "" 0 0 0 "">
<190 120 320 120 "P" 240 90 15 "">
<190 110 190 120 "" 0 0 0 "">
<190 120 190 210 "" 0 0 0 "">
<190 210 200 210 "" 0 0 0 "">
<250 270 250 310 "" 0 0 0 "">
<250 270 330 270 "G" 290 300 12 "">
<250 140 320 140 "" 0 0 0 "">
<250 140 250 170 "" 0 0 0 "">
<150 170 250 170 "" 0 0 0 "">
<150 230 200 230 "" 0 0 0 "">
<150 170 150 230 "" 0 0 0 "">
<20 70 50 70 "" 0 0 0 "">
<20 170 50 170 "" 0 0 0 "">
<50 230 50 330 "Ci" 80 330 71 "">
<10 330 50 330 "" 0 0 0 "">
<390 260 440 260 "Co" 430 230 7 "">
<440 260 440 290 "" 0 0 0 "">
<380 130 420 130 "S" 430 100 19 "">
<420 130 420 160 "" 0 0 0 "">
<260 220 260 220 "PCi" 290 190 0 "">
</Wires>
<Diagrams>
</Diagrams>
<Paintings>
</Paintings>
```