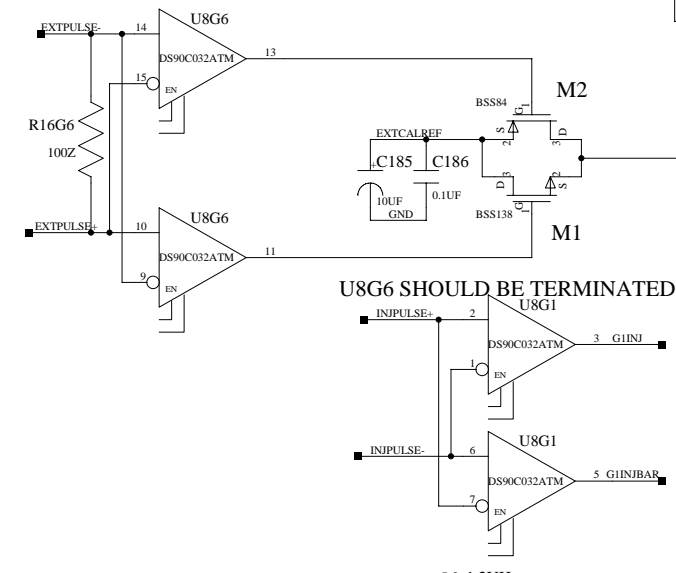
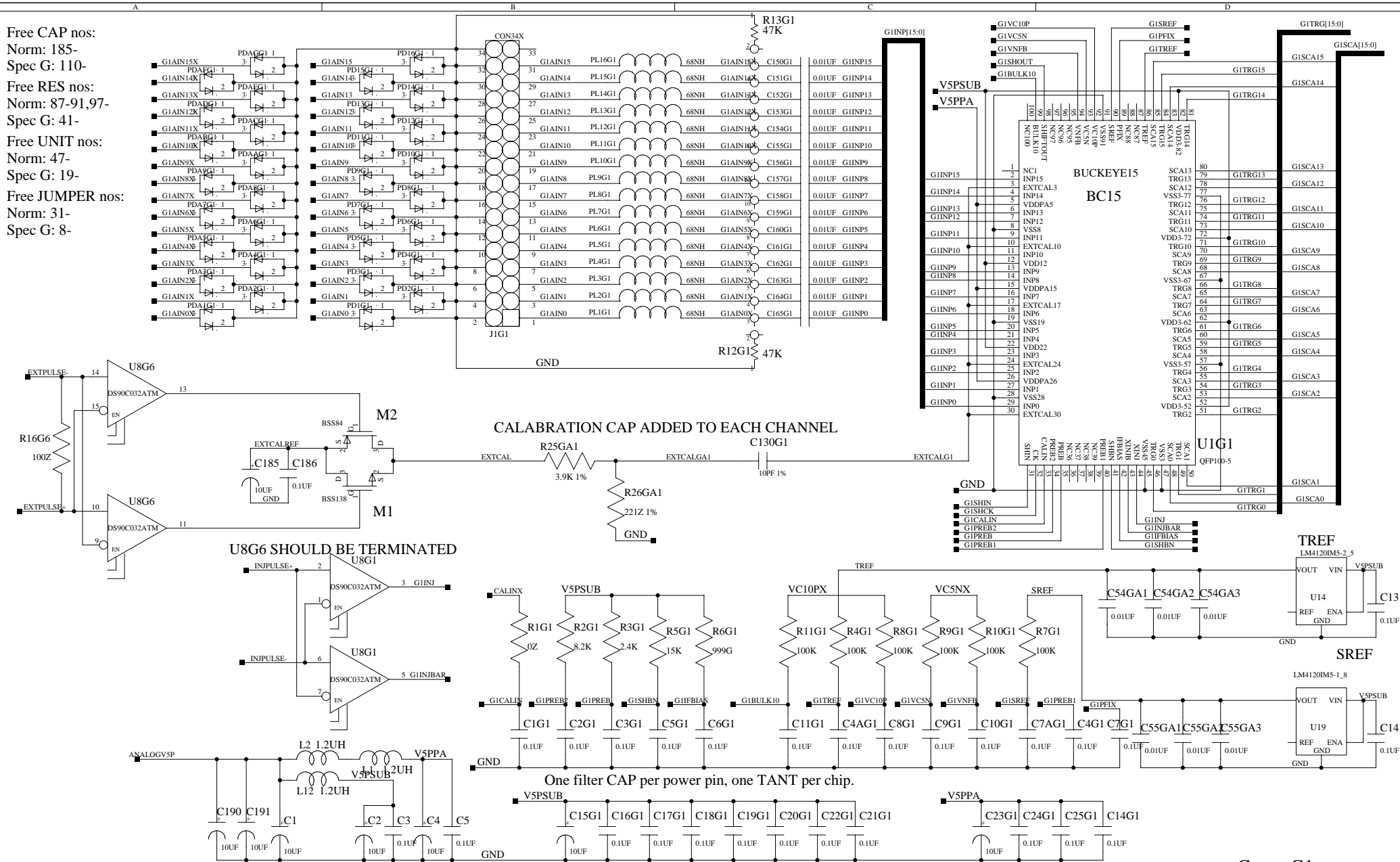


Free CAP nos:
 Norm: 185-
 Spec G: 110-
 Free RES nos:
 Norm: 87-91,97-
 Spec G: 41-
 Free UNIT nos:
 Norm: 47-
 Spec G: 19-
 Free JUMPER nos:
 Norm: 31-
 Spec G: 8-



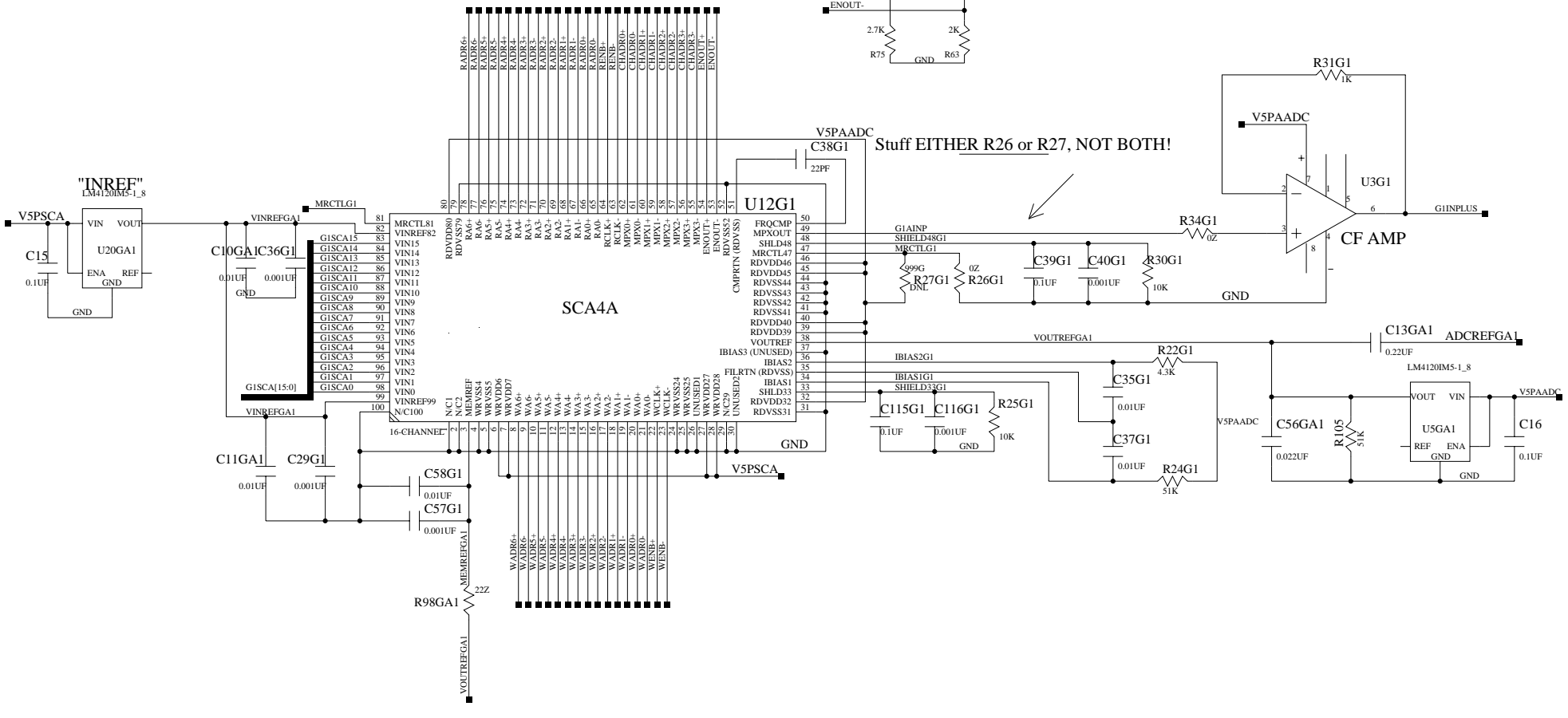
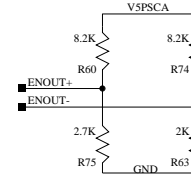
CALABRATION CAP ADDED TO EACH CHANNEL

One filter CAP per power pin, one TANT per chip.

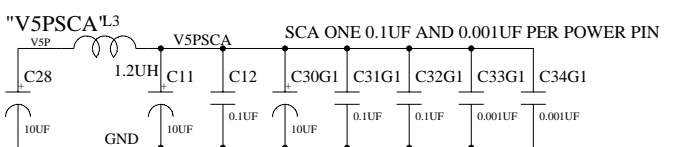
Group G1
 CFEBVTX

The 'B' signals are for in between pairs.

ENOUT VOLTAGE DIVIDER CIRCUIT FOR LVDS INPUT.
COMMON TO ALL SCA'S



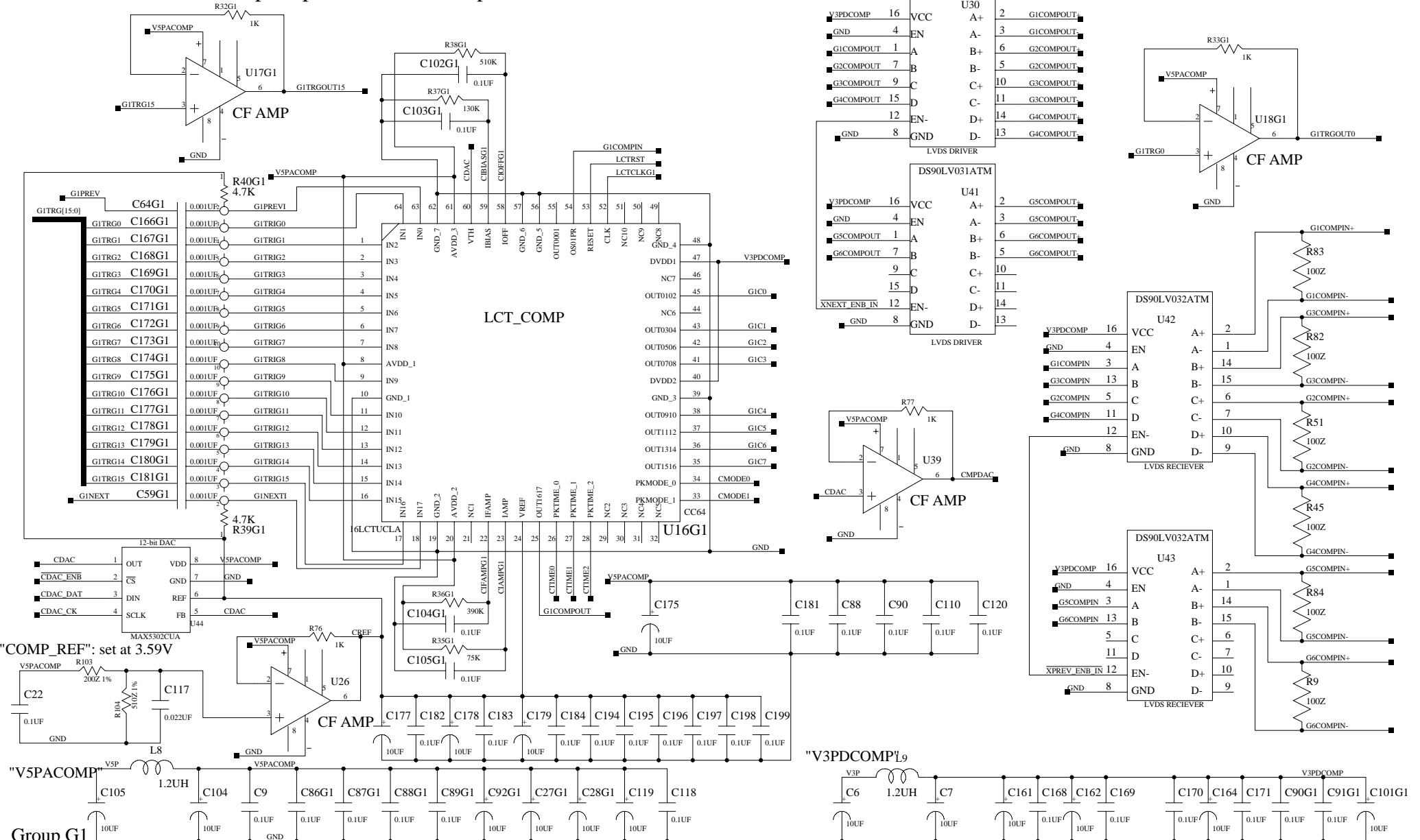
Stuff EITHER R26 or R27, NOT BOTH!



FILTER CAPS FOR AD8011 AND V5PAADC - NEXT PAGE

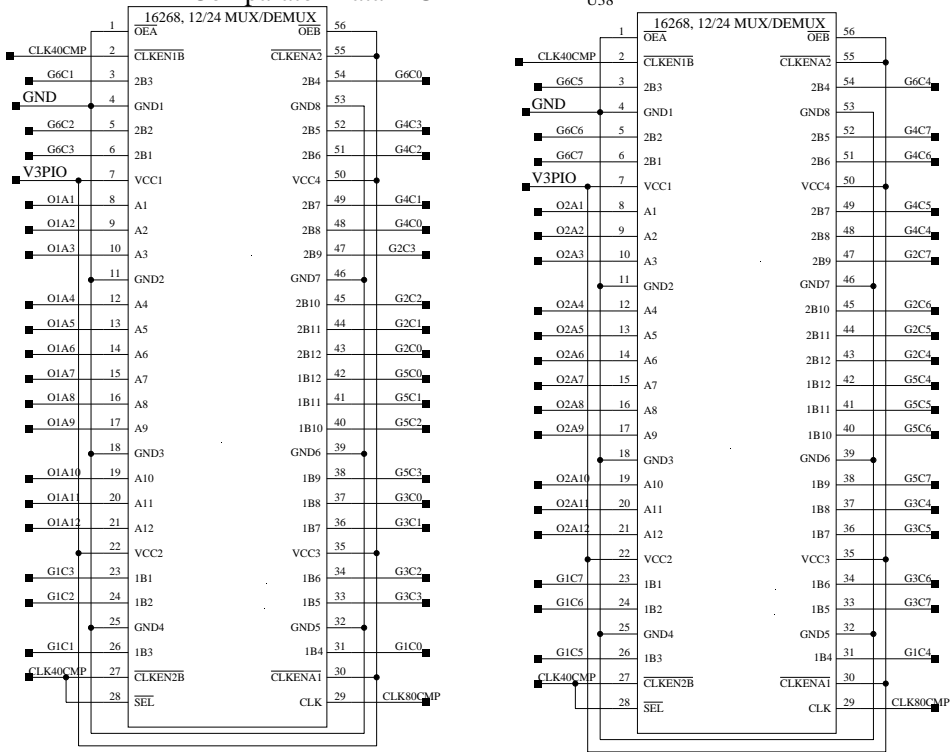
Group G1 (and GA1)

Put the op-amps near the branch point of the traces!

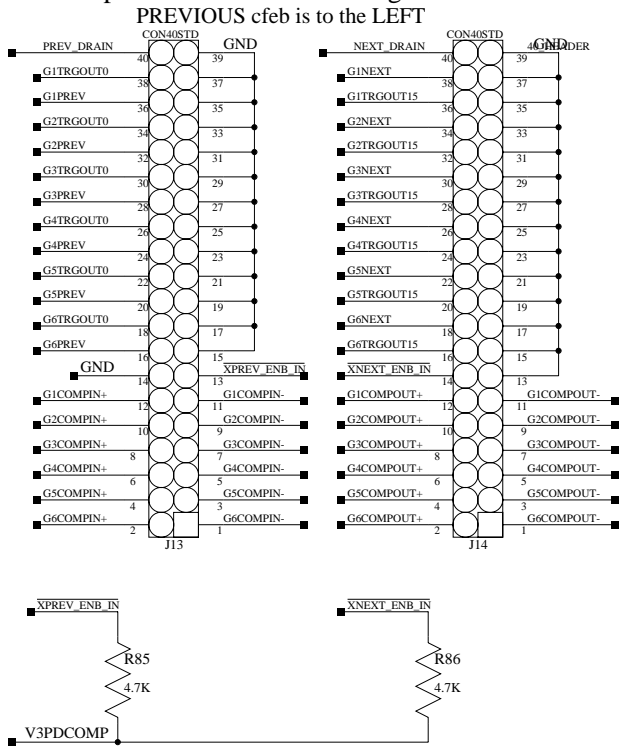


7-16-2001_13:53

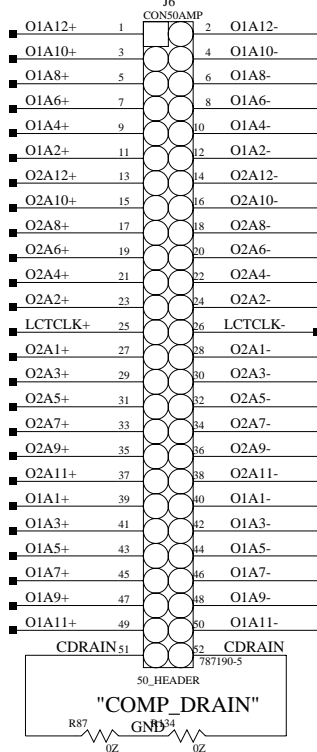
Comparator Data MUX



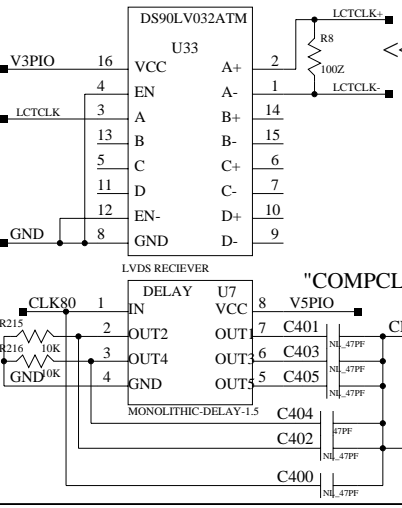
Comparator Connectors to neighbor CFEBs



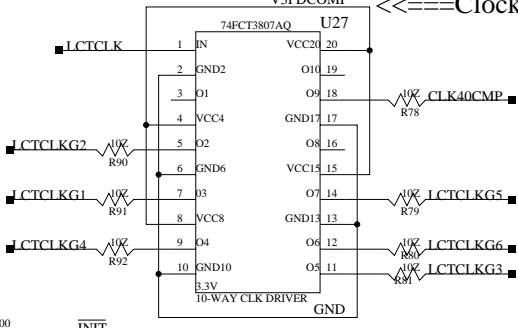
CFEB to LCT99 Connector



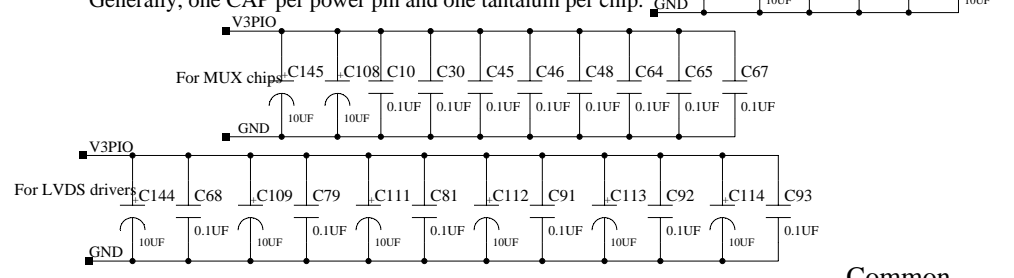
LVDS Receiver for Comparator signals from LCT99



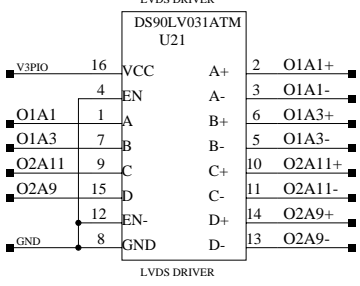
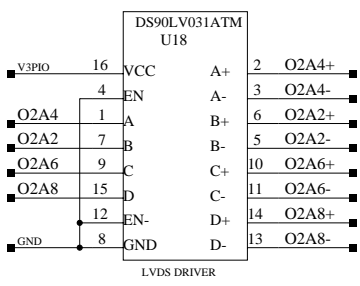
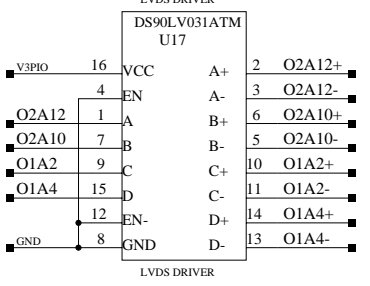
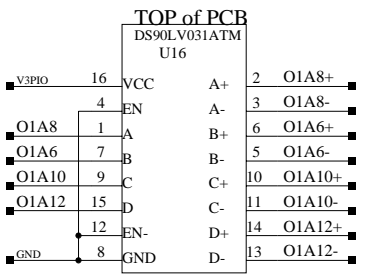
Clock Driver for 40MHz Comparator clock



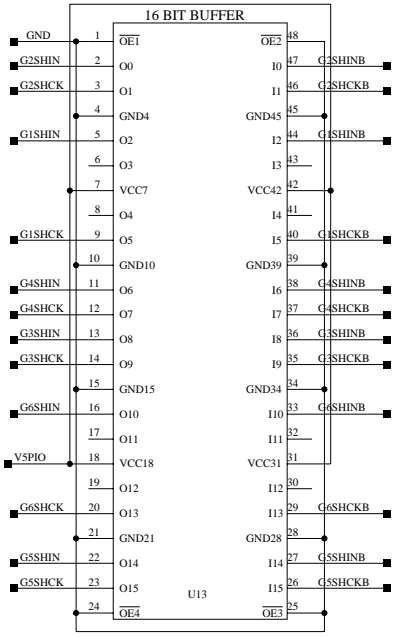
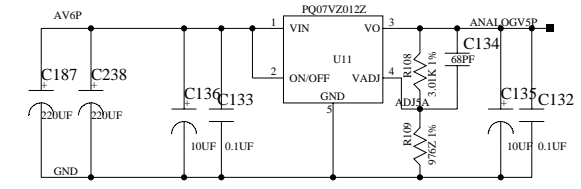
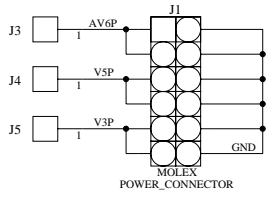
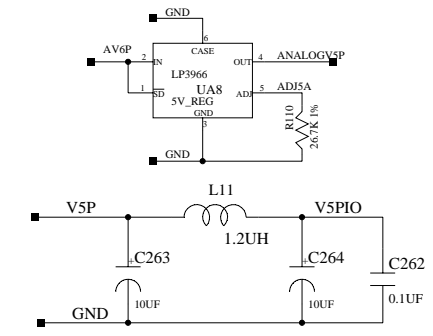
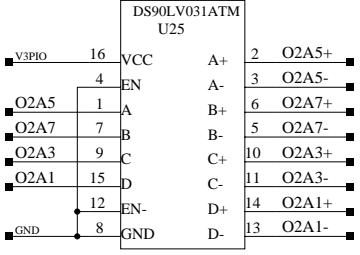
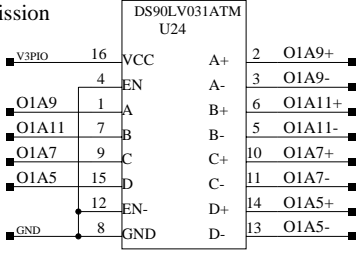
Three filter CAPs per power pin on Channel Links (.1, .01, .001uF).



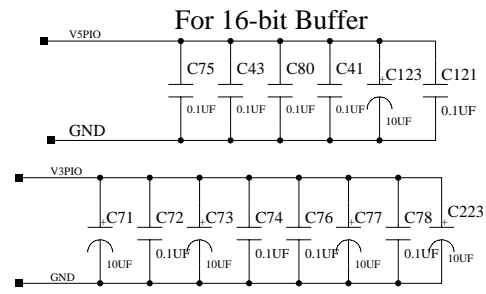
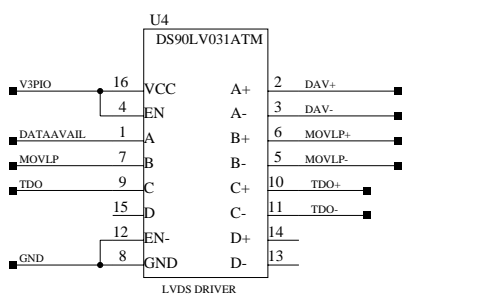
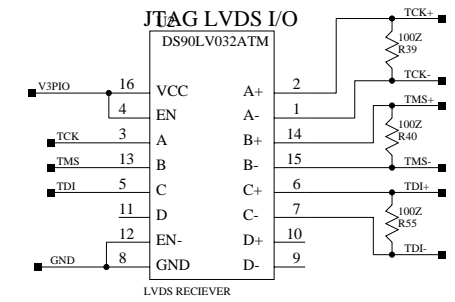
LVDS Drivers for Comparator Data Transmission



Bottom of PCB

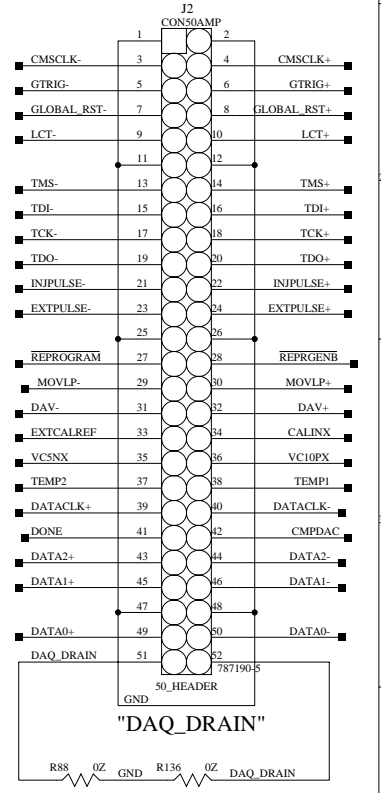


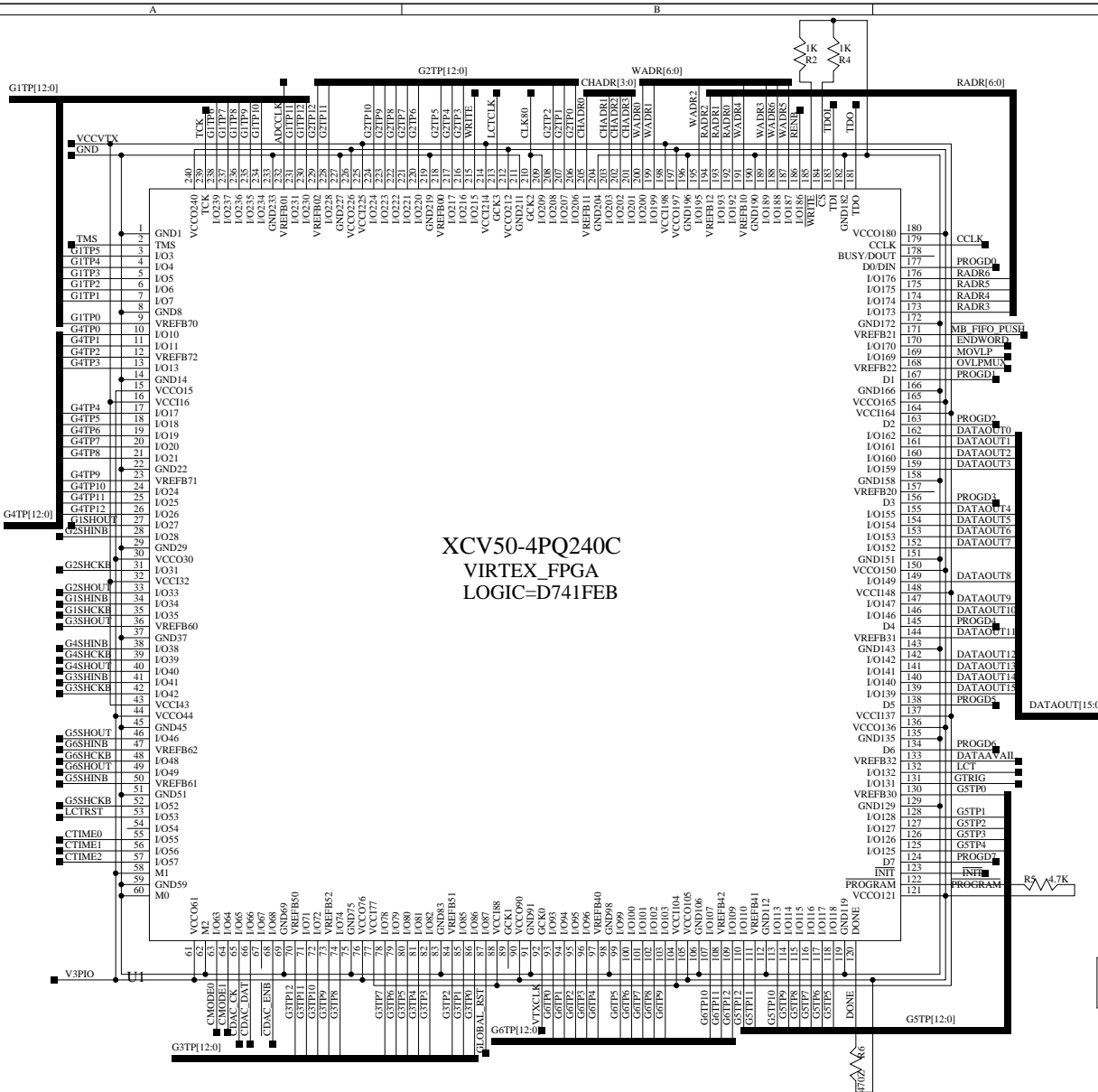
Common



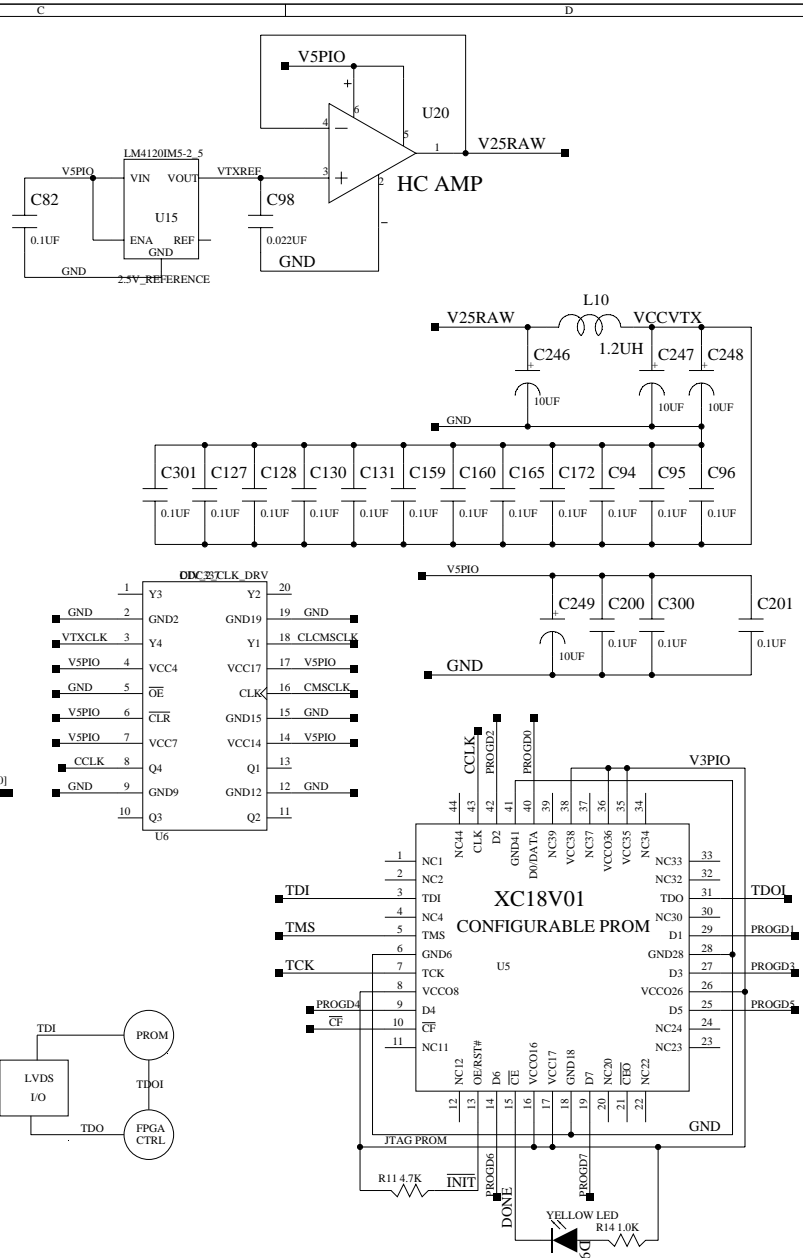
CFEB to DAQMB AMP Connector

The Proms are reprogrammed through jtag instruction. The LDC indicates status of configuration





XCV50-4PQ240C
VIRTEX_FPGA
LOGIC=D741FEB



FROM MBRD

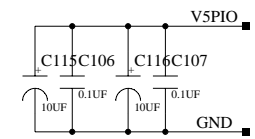
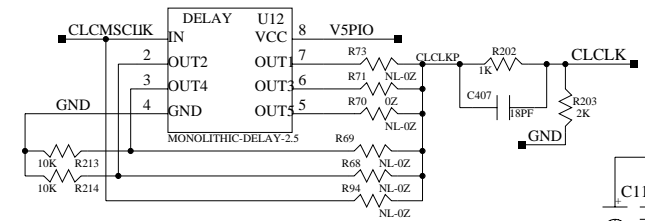
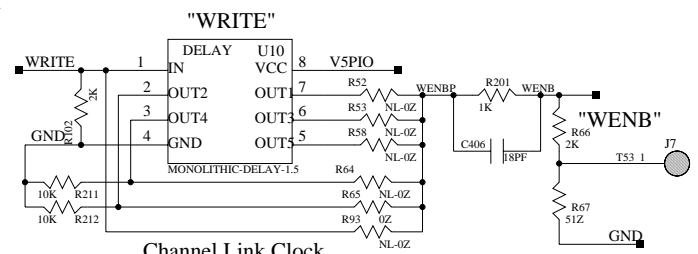
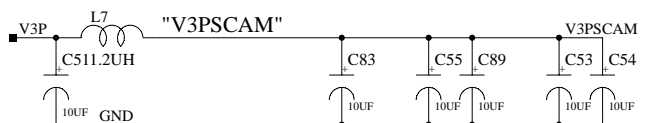
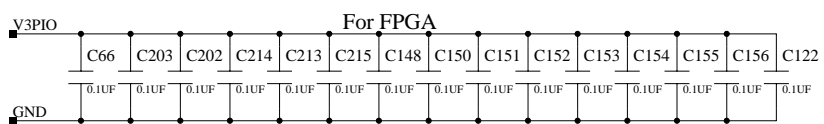
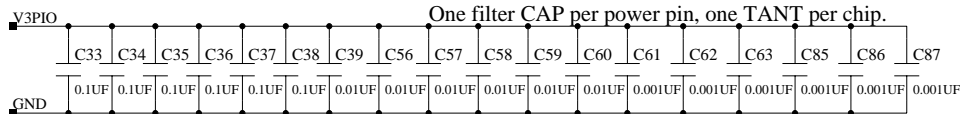
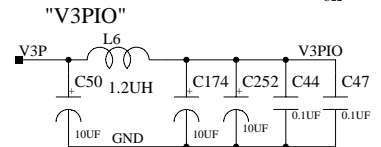
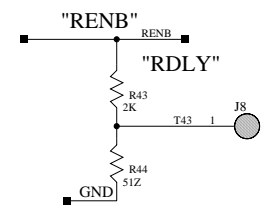
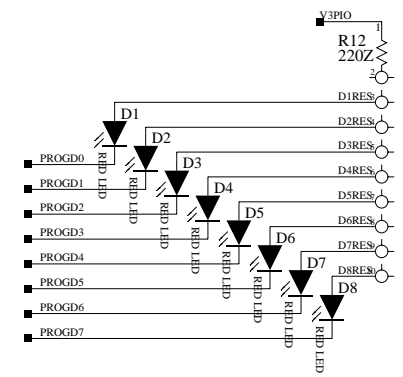
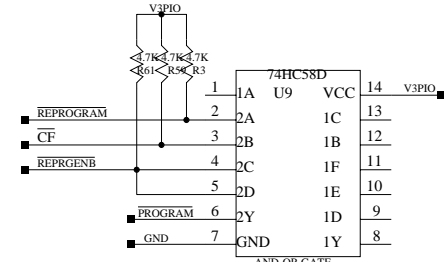
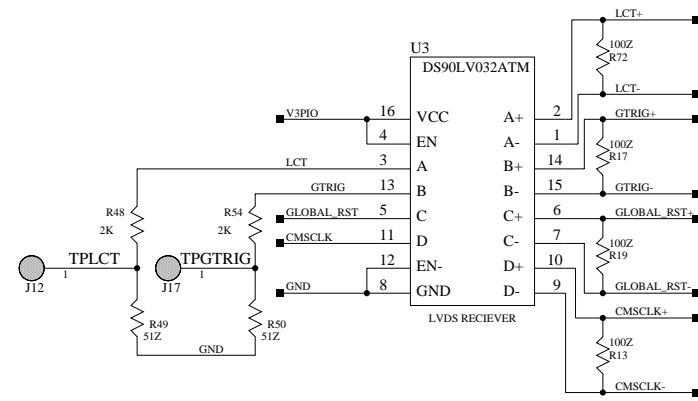
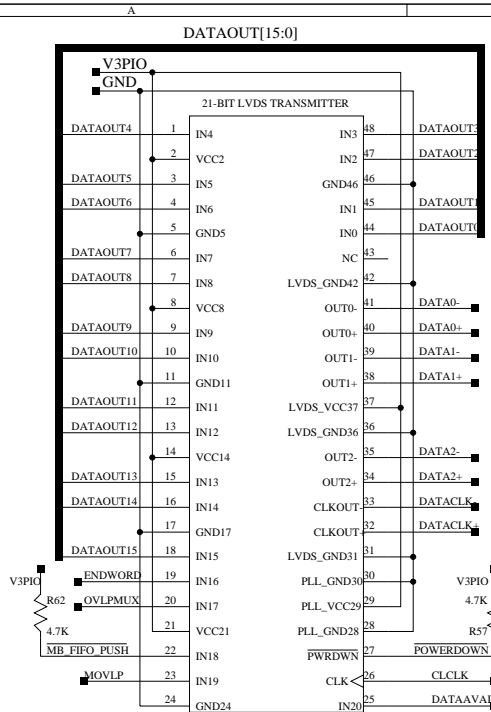
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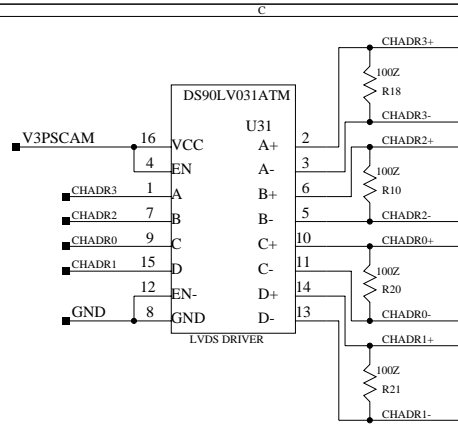
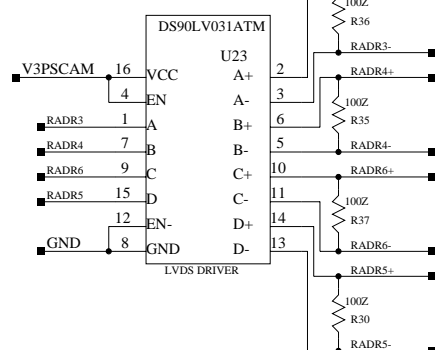
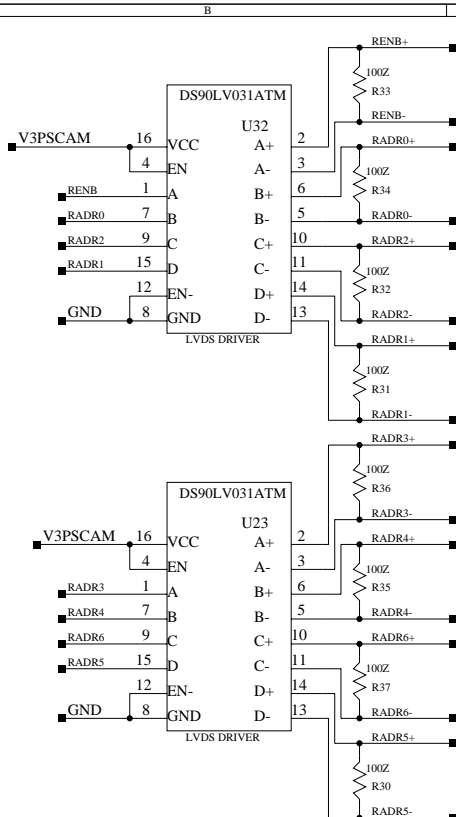
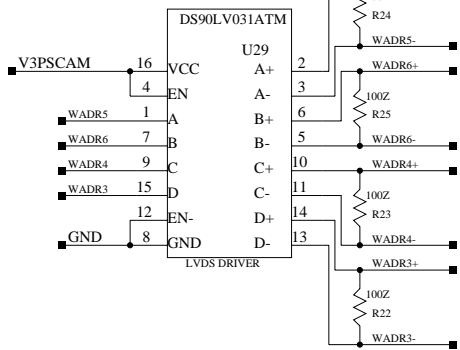
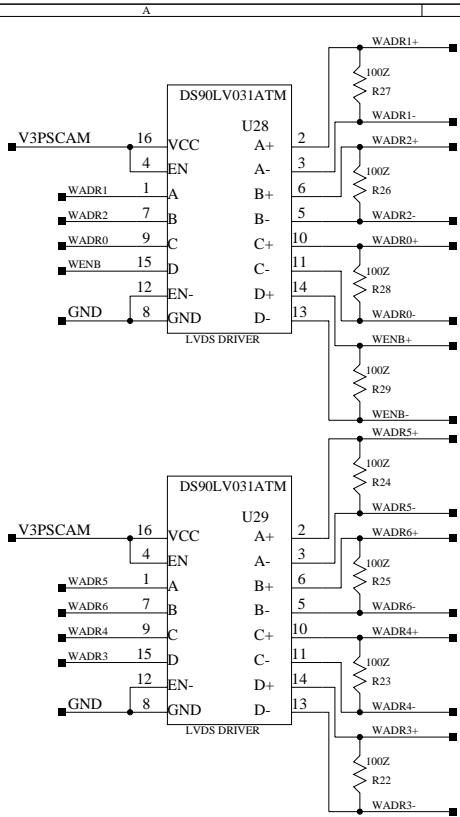
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Read/Write Control
Cathode Front End Card
CMS CSC Electronics

BY GU PARENT PAGE
DATE 10-2-2001_9:43

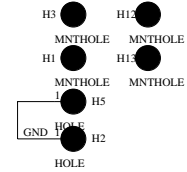
PROJECT
cfebvtx
FILE CFEVBVTX . 7
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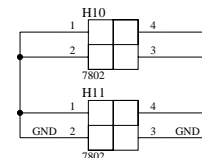
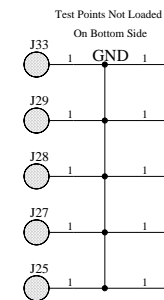
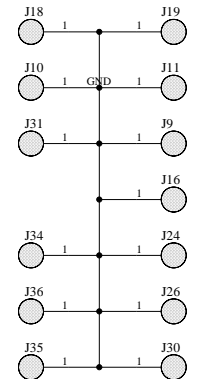
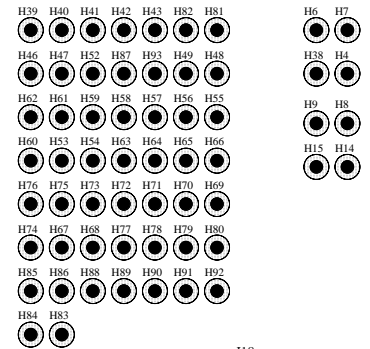
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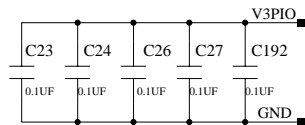
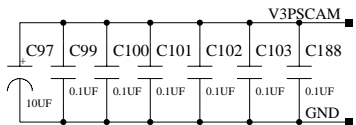
Board Mounting Holes



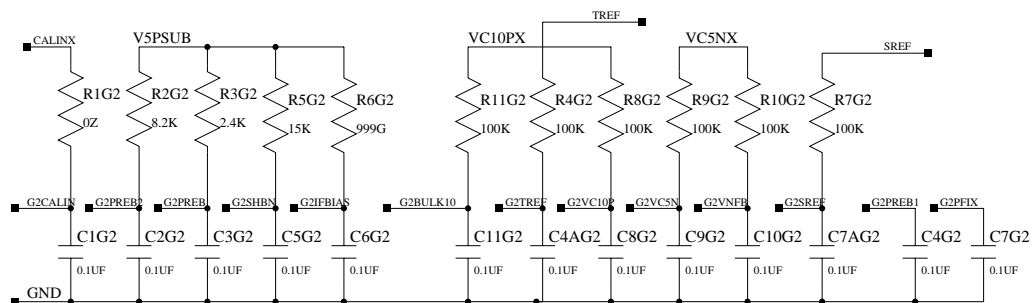
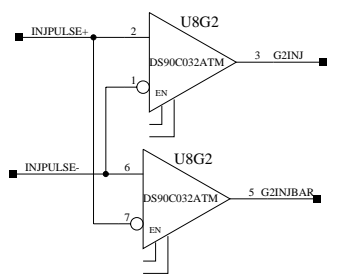
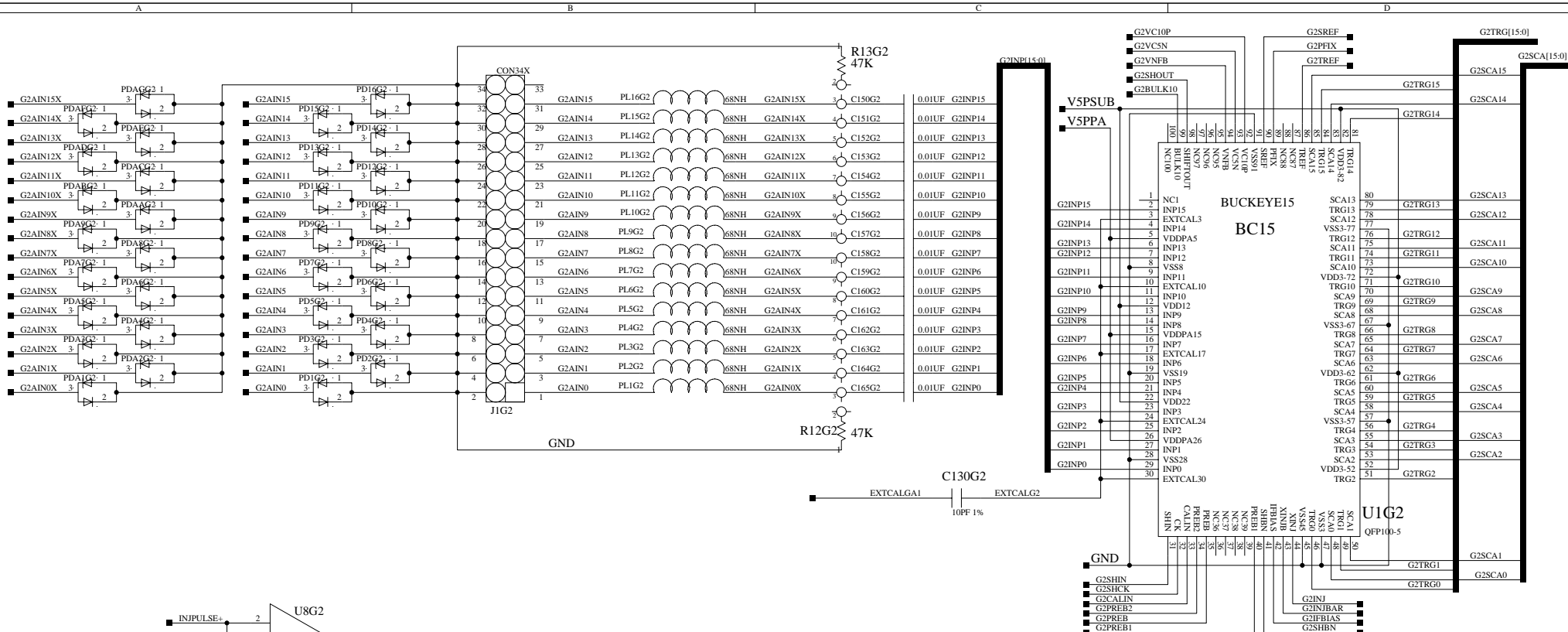
Global Alignment Holes



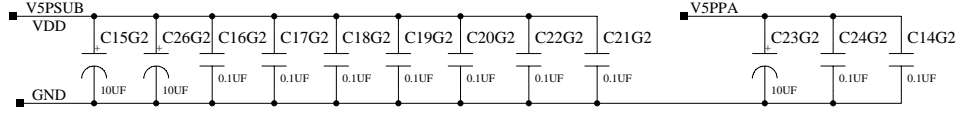
Ground Lug, to Chamber

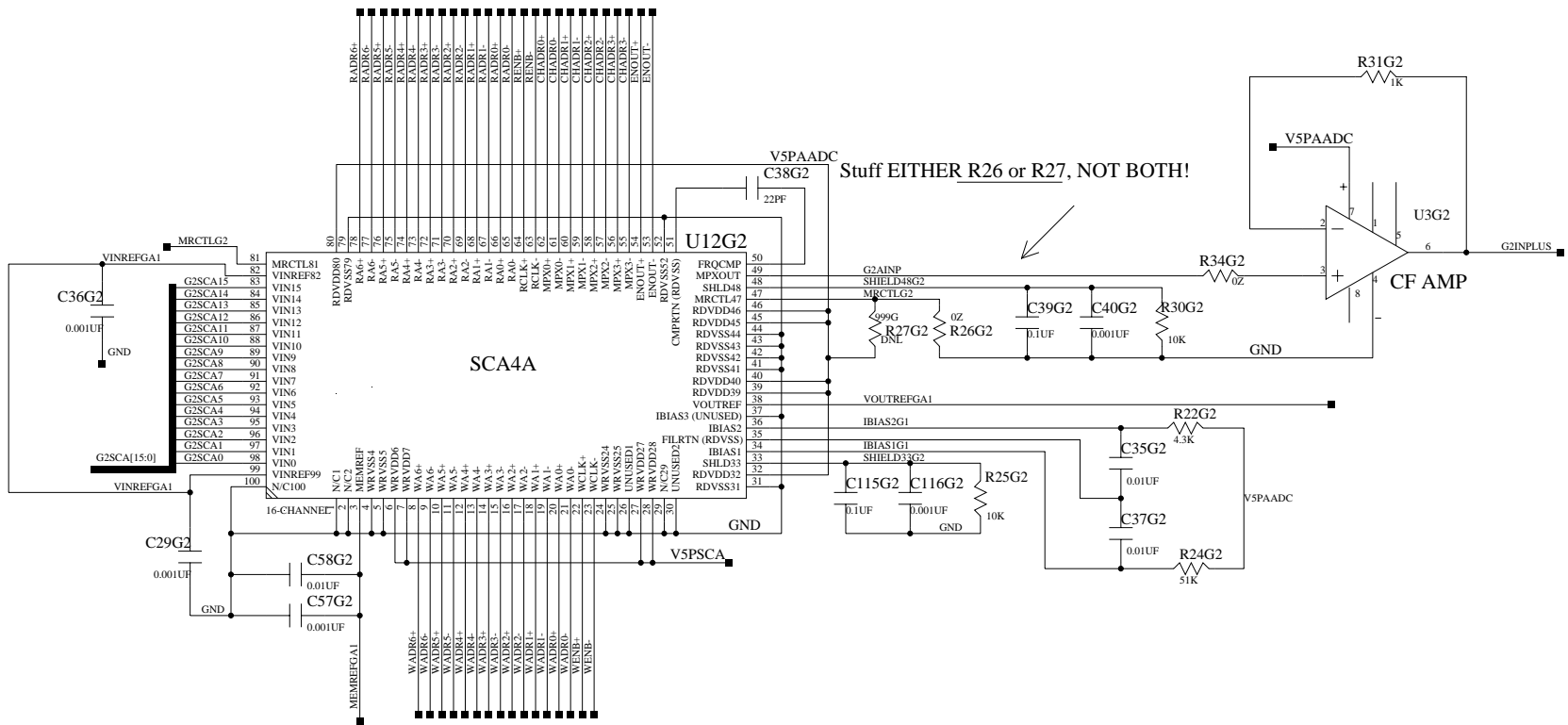


Common



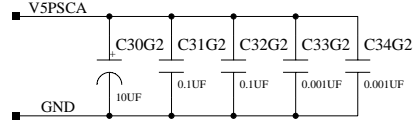
One filter CAP per power pin, one TANT per chip.





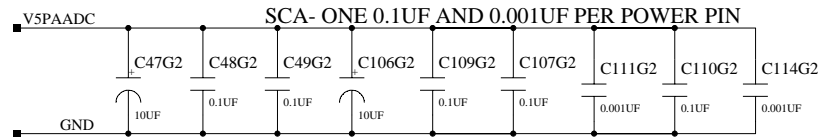
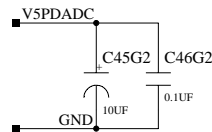
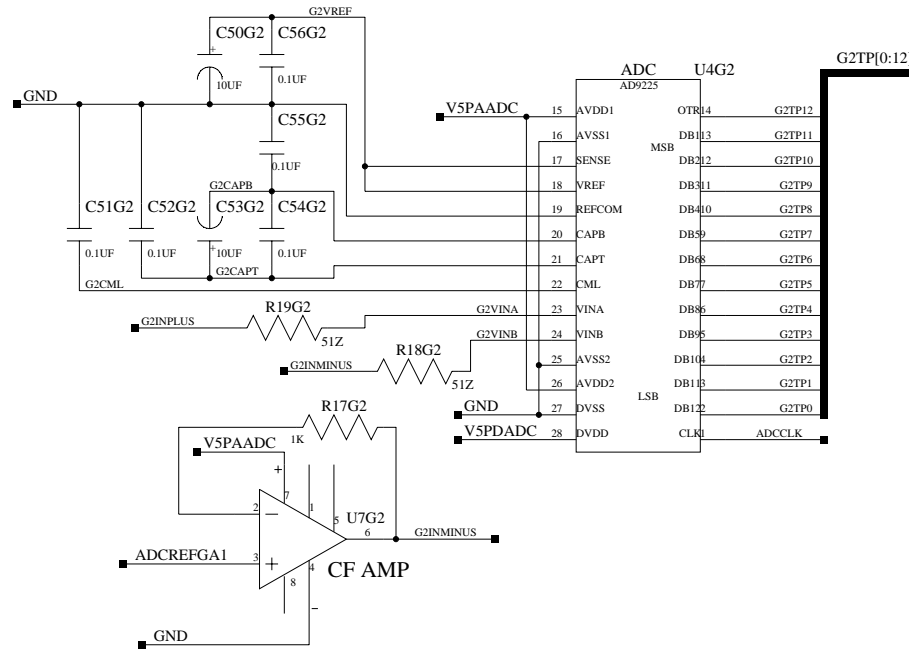
Stuff EITHER R26 or R27, NOT BOTH!

SCA ONE 0.1UF AND 0.001UF PER POWER PIN



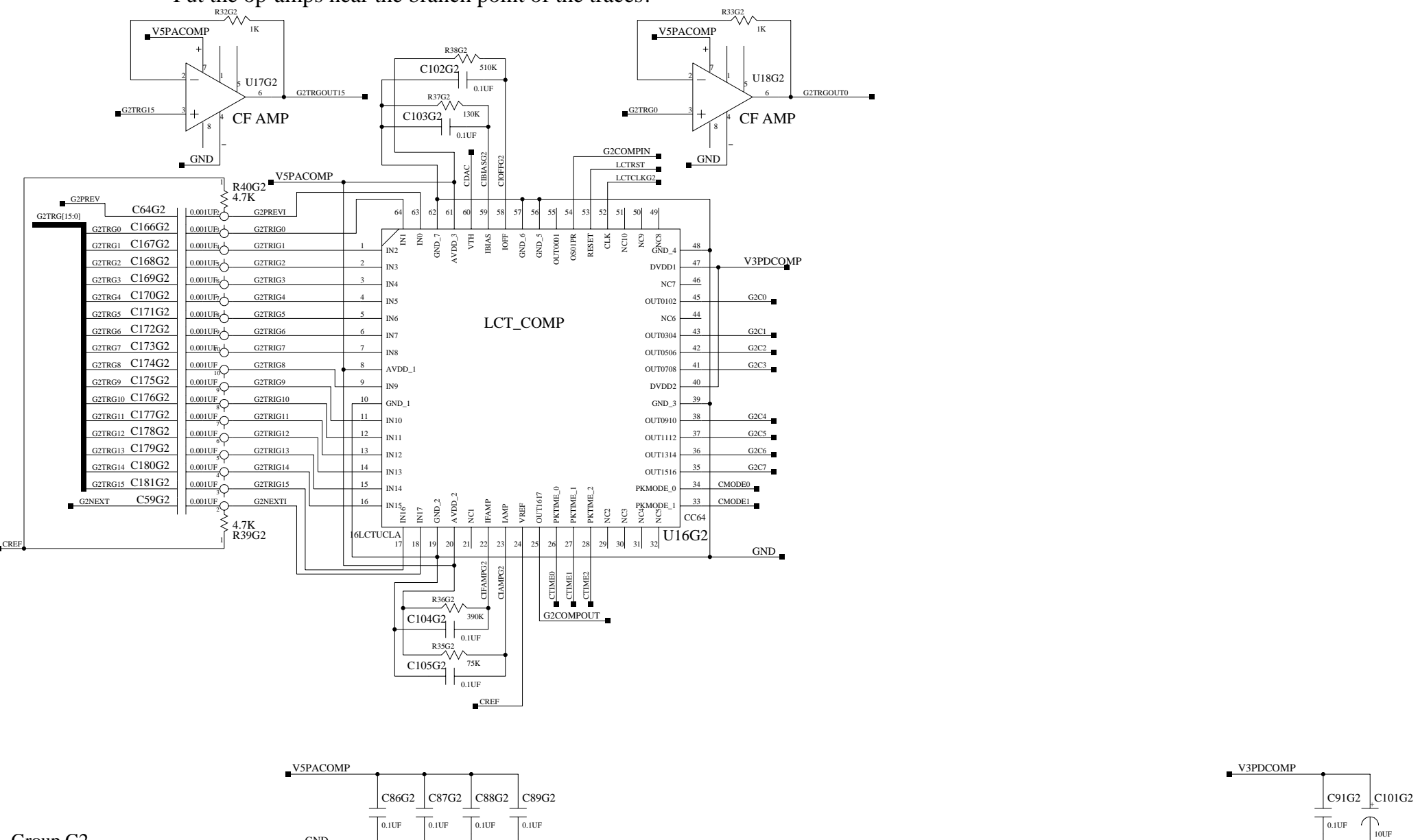
Group G2 (and GA1)

The 'B' signals are for in between pairs.



Group G2 (and GA1)

Put the op-amps near the branch point of the traces!



Group G2

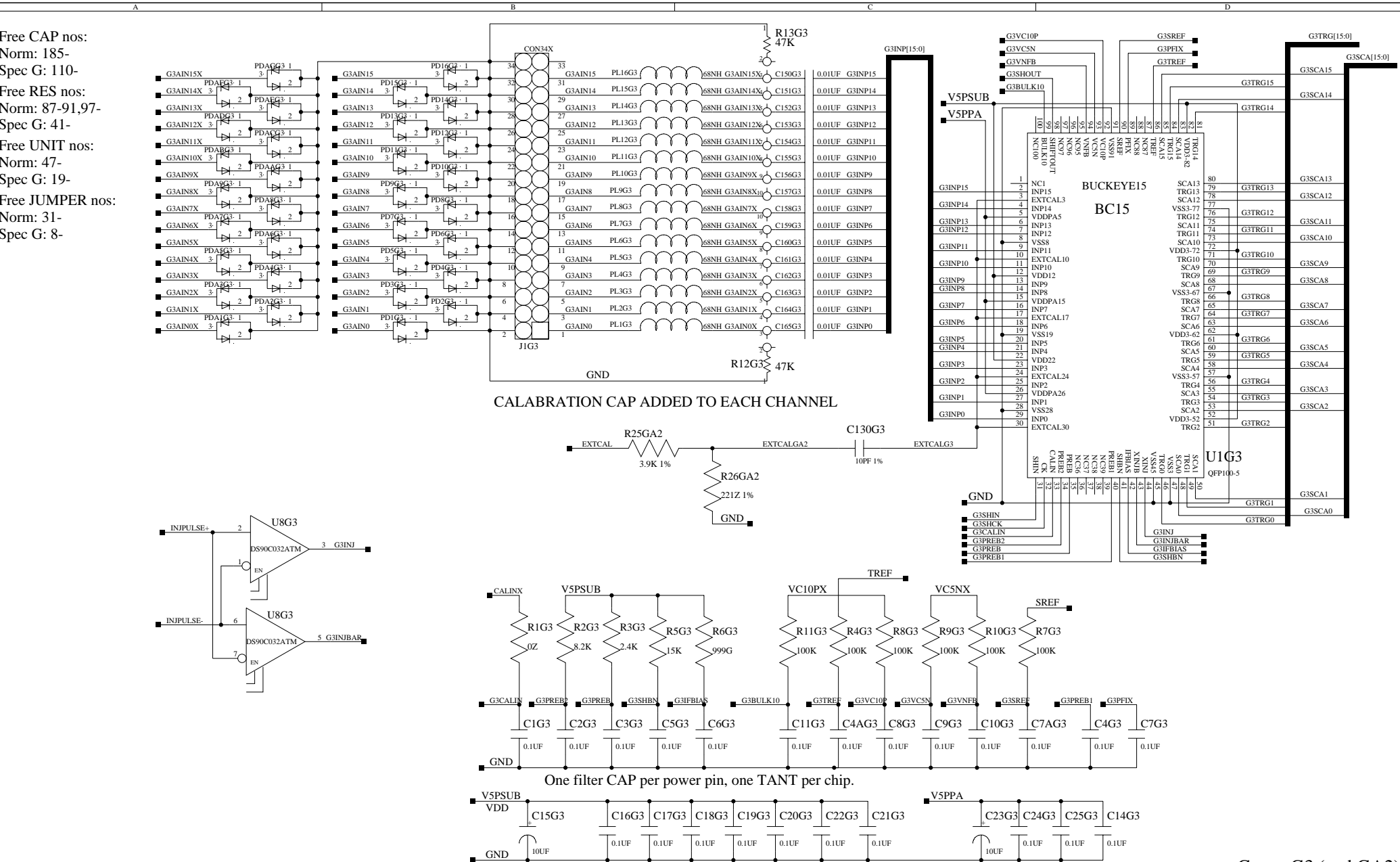
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 PHYSICS DEPARTMENT ELECTRONICS LAB
 174 WEST 18TH AVE. COLUMBUS OH 43210

TITLE
 Cathode Comparator System
 Cathode Front End Card
 CMS CSC Electronics

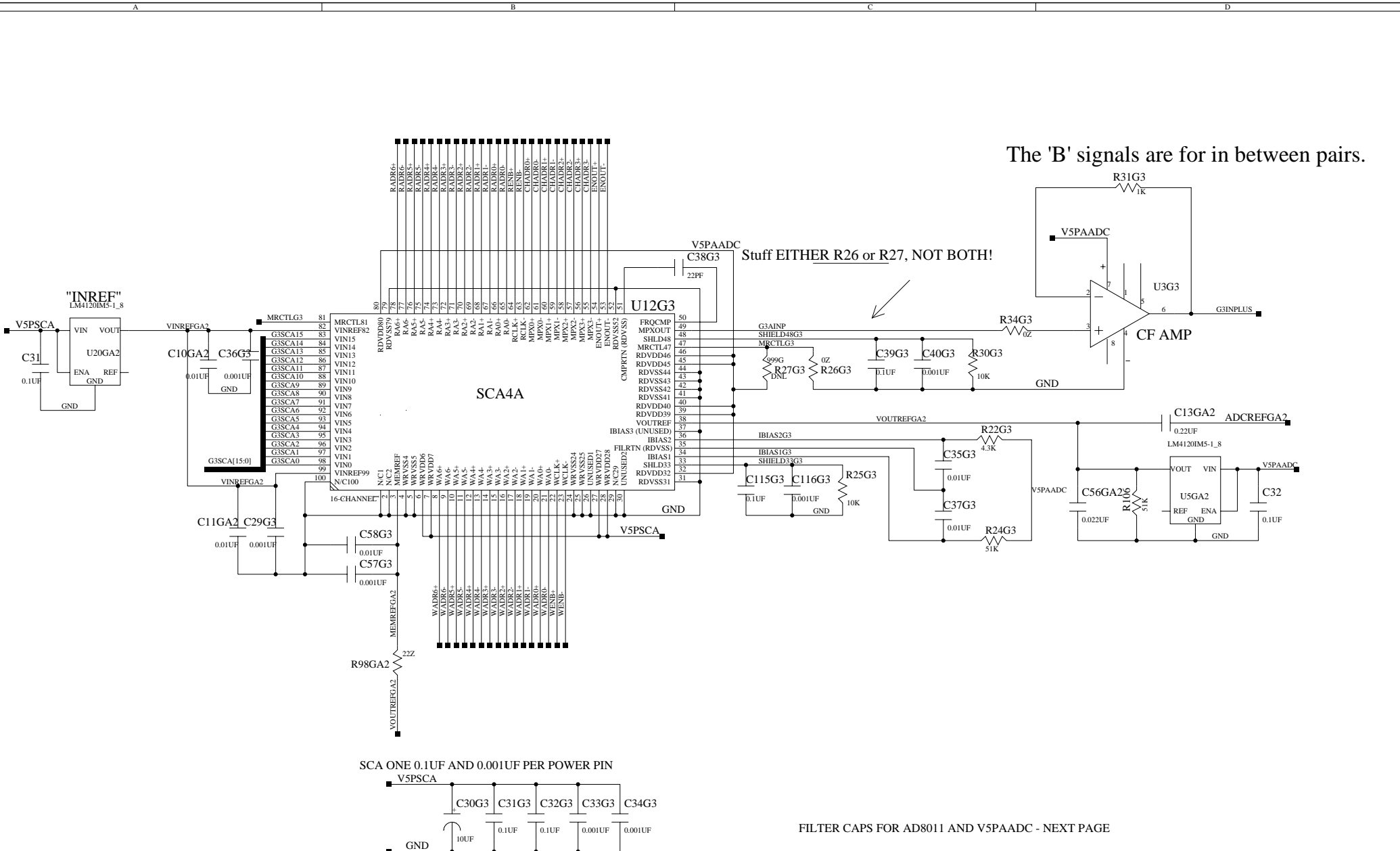
BY JRG
 DATE 10-2-2001 9:43

PARENT PAGE
 PROJECT CFEVVTX
 FILE CFEVVTX . 13
 PAGE

Free CAP nos:
 Norm: 185-
 Spec G: 110-
 Free RES nos:
 Norm: 87-91,97-
 Spec G: 41-
 Free UNIT nos:
 Norm: 47-
 Spec G: 19-
 Free JUMPER nos:
 Norm: 31-
 Spec G: 8-



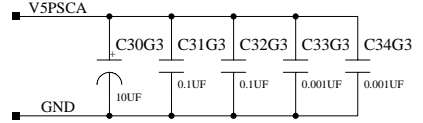
Group G3 (and GA2)



The 'B' signals are for in between pairs.

Stuff EITHER R26 or R27, NOT BOTH!

SCA ONE 0.1UF AND 0.001UF PER POWER PIN

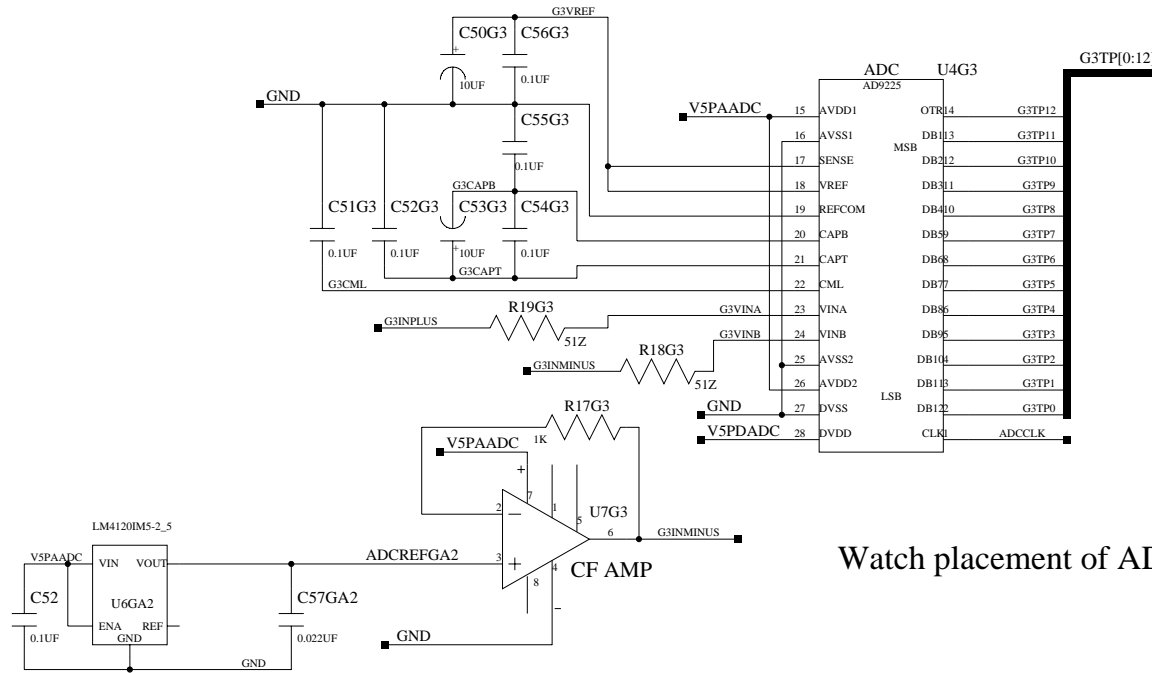


FILTER CAPS FOR AD8011 AND V5PAADC - NEXT PAGE

Group G3 (and GA2)

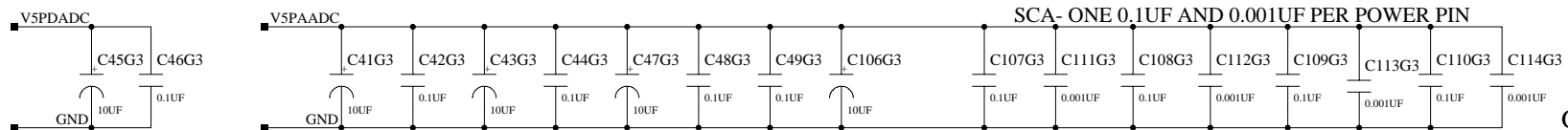
Consider SMT/Resettable fuses in the future...

The 'B' signals are for in between pairs.



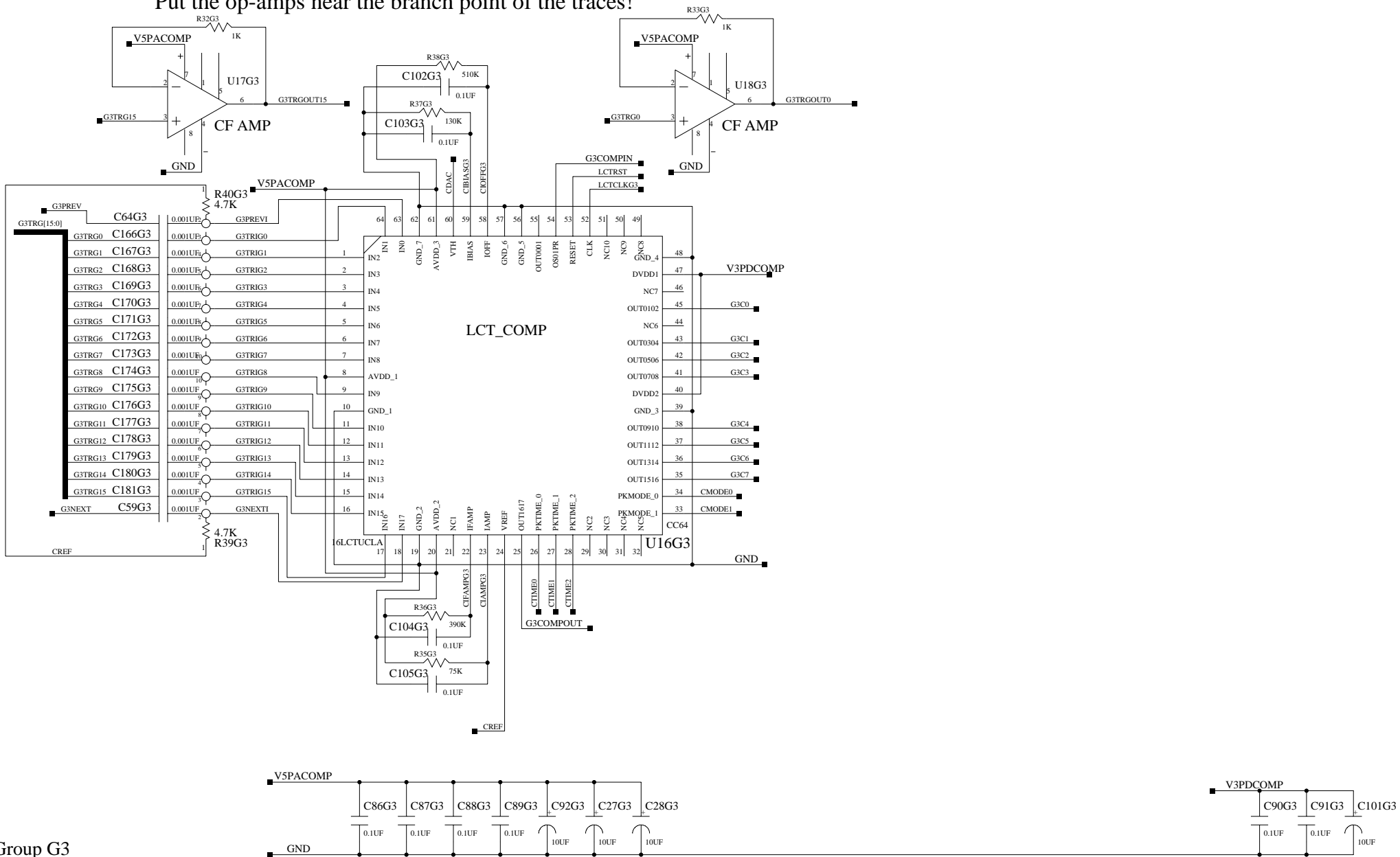
Watch placement of ADCCLK termination!

Generally, one filter CAP per power pin, one TANT per chip.



Group G3 (and GA2)

Put the op-amps near the branch point of the traces!



Group G3

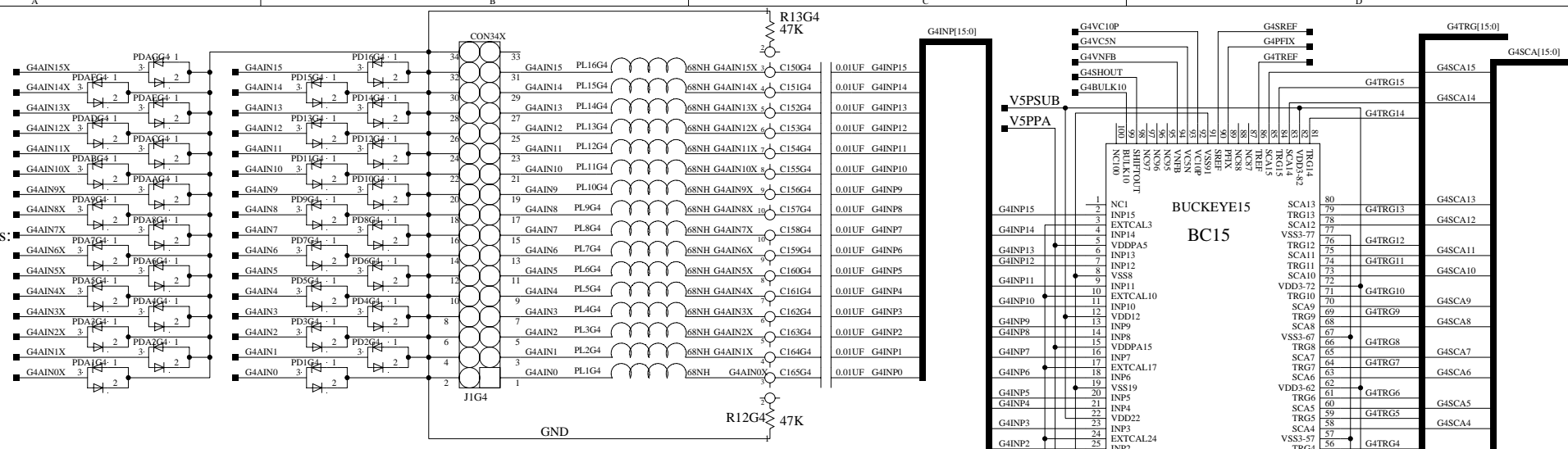
THE OHIO STATE UNIVERSITY
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174 WEST 18TH AVE. COLUMBUS OH 43210

TITLE
Cathode Comparator System
Cathode Front End Card
CMS CSC Electronics

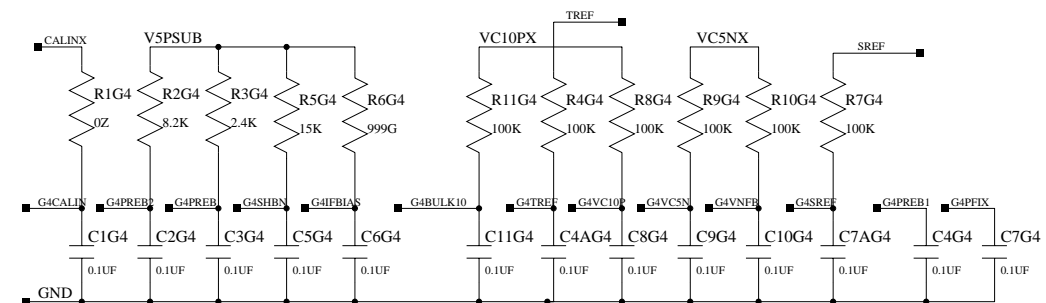
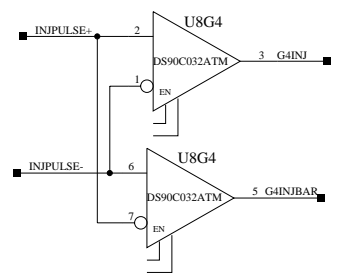
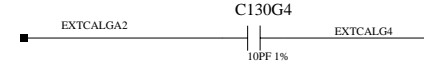
BY G
DATE
PARENT PAGE
PROJECT
FILE
10-2-2001_9:43

V3PDCOMP
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0.1UF 0.1UF 10UF
PAGE
CFEBVTX . 17

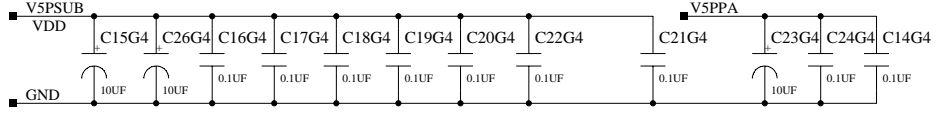
Free CAP nos:
 Norm: 185-
 Spec G: 110-
 Free RES nos:
 Norm: 87-91,97-
 Spec G: 41-
 Free UNIT nos:
 Norm: 47-
 Spec G: 19-
 Free JUMPER nos:
 Norm: 31-
 Spec G: 8-



CALABRATION CAP ADDED TO EACH CHANNEL



One filter CAP per power pin, one TANT per chip.



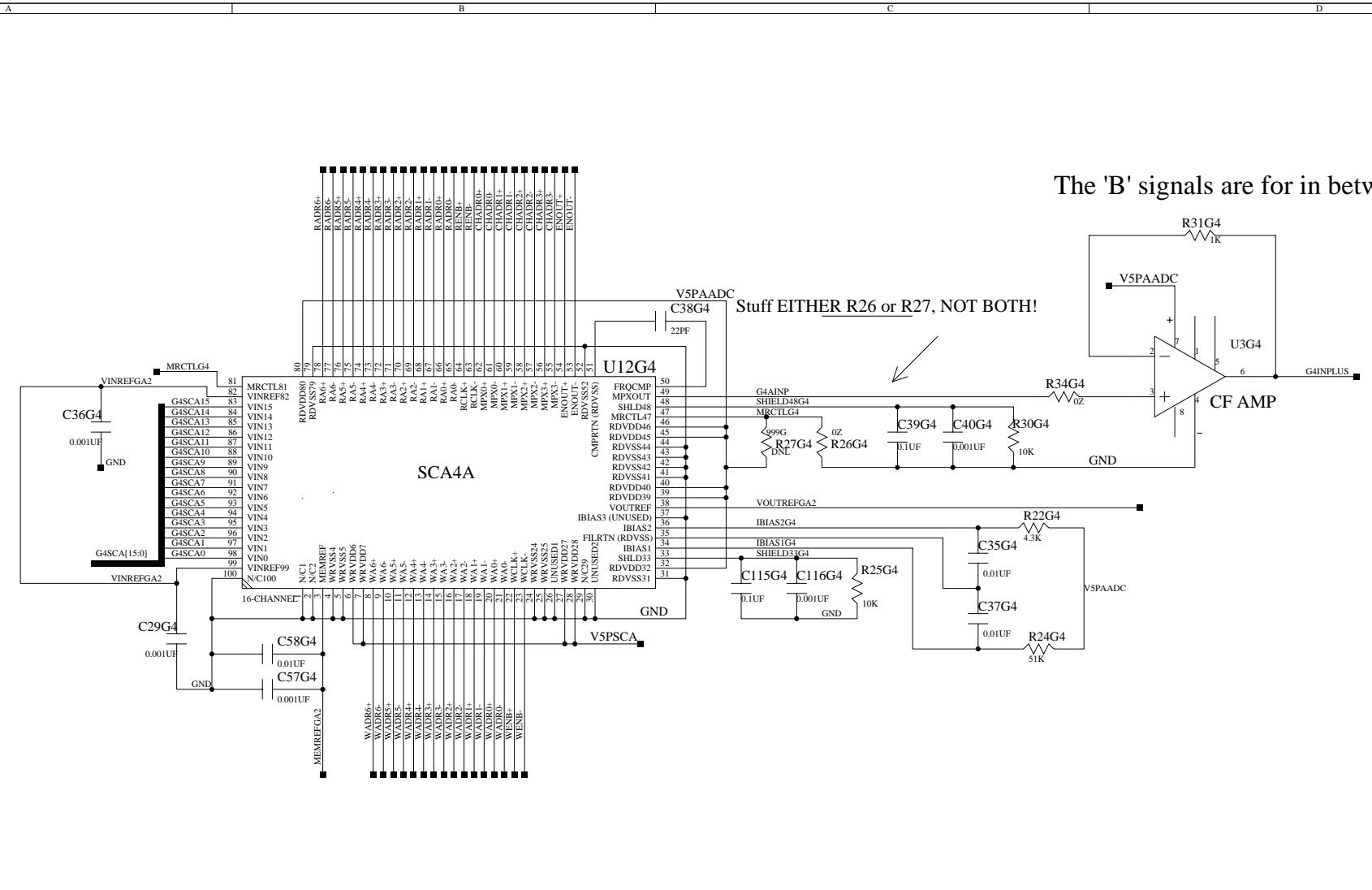
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TITLE Buckeye Chip
 Cathode Front End Card
 CMS CSC Electronics

BY G PARENT PAGE
 DATE 10-2-2001_9:43

PROJECT
 FILE CFEBVTX . 18 PAGE

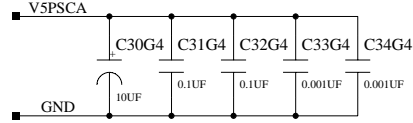
Group G4
 CFEBVTX



The 'B' signals are for in between pairs.

Stuff EITHER R26 or R27, NOT BOTH!

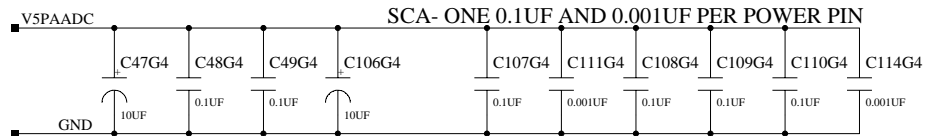
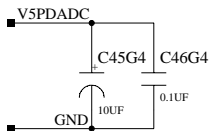
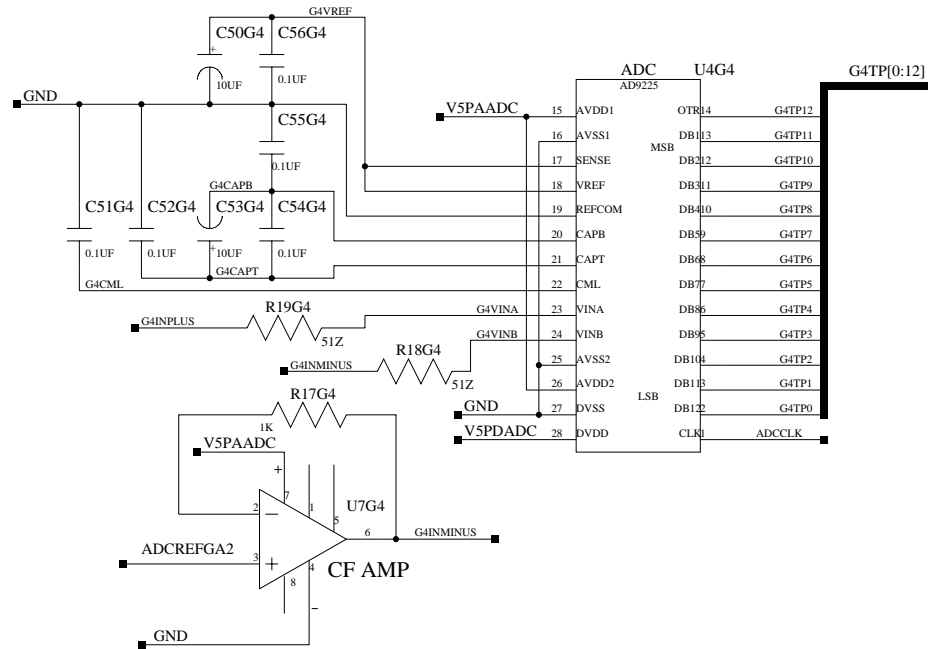
SCA ONE 0.1UF AND 0.001UF PER POWER PIN



Group G4 (and GA2)

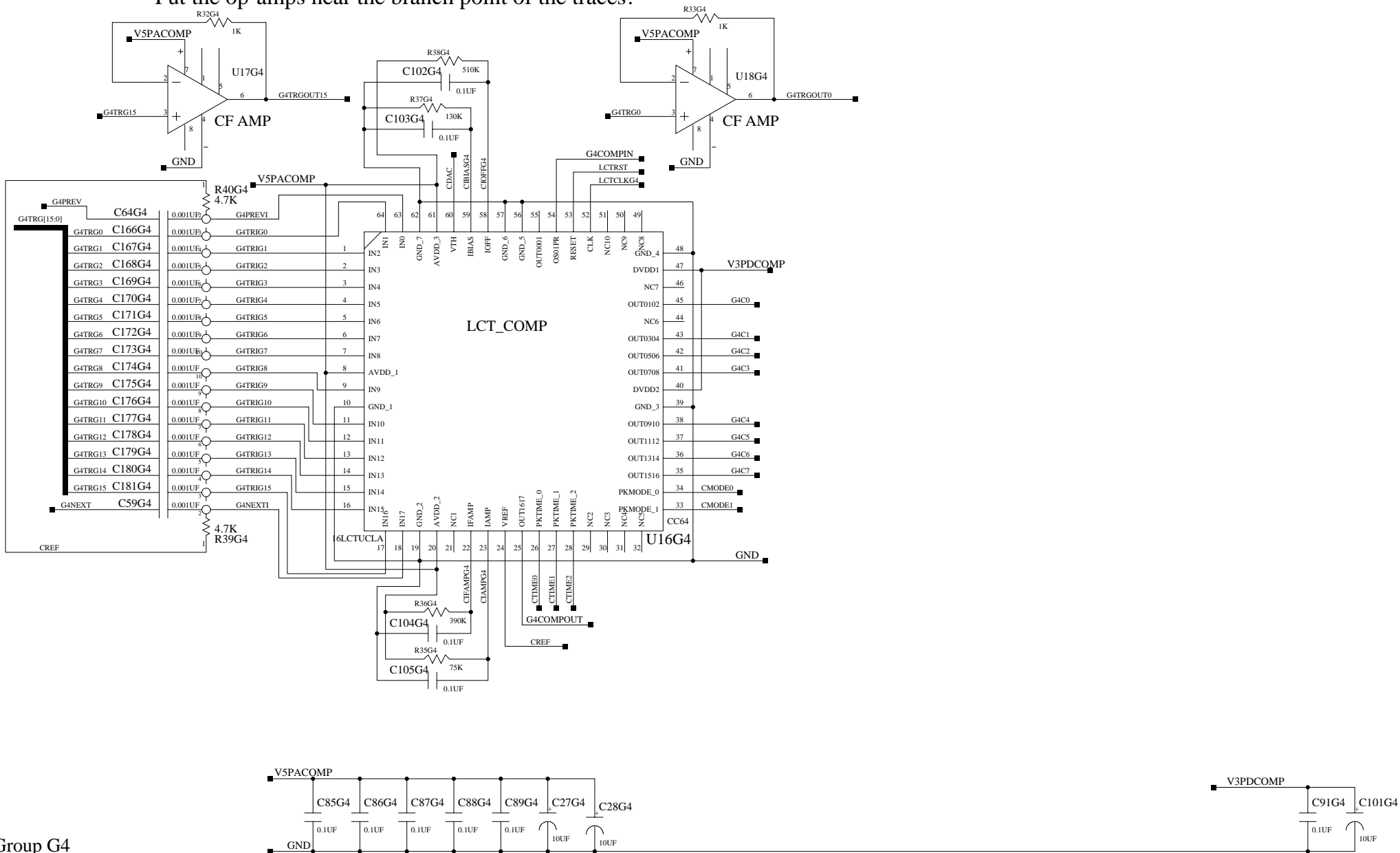
Consider SMT/Resettable fuses in the future...

The 'B' signals are for in between pairs.



Group G4 (and GA2)

Put the op-amps near the branch point of the traces!



Group G4

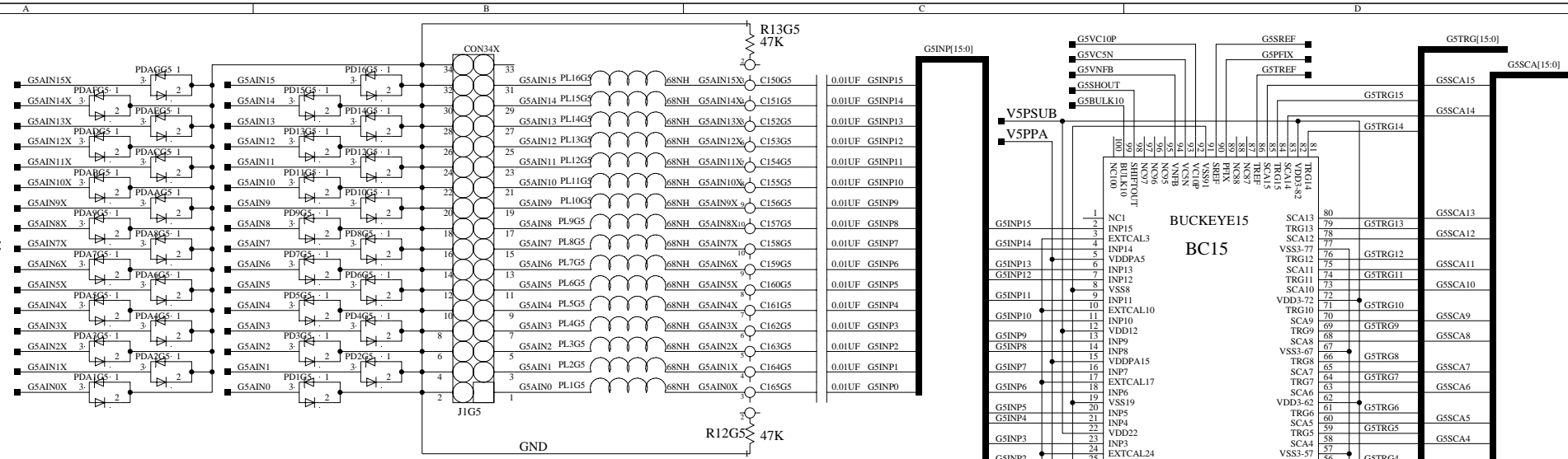
THE OHIO STATE UNIVERSITY
PHYSICS DEPARTMENT ELECTRONICS LAB
174 WEST 18TH AVE. COLUMBUS OH 43210

TITLE
Cathode Comparator System
Cathode Front End Card
CMS CSC Electronics

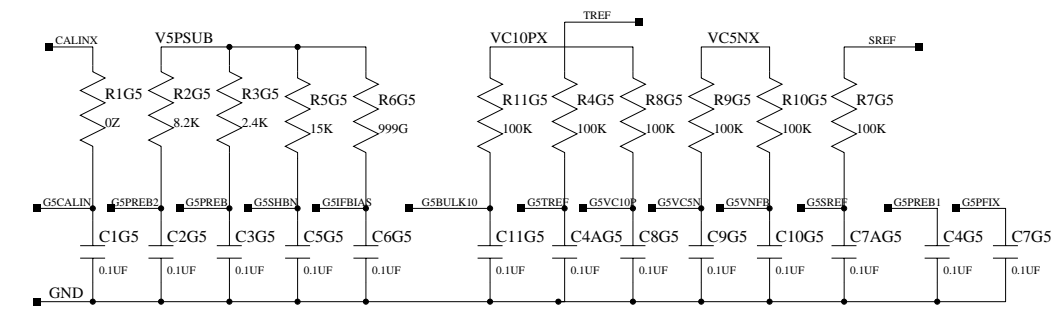
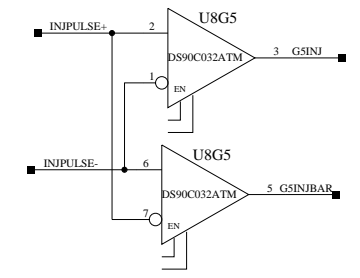
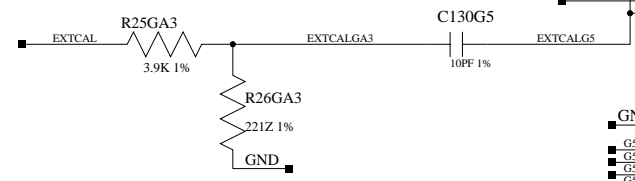
BY G
DATE
PARENT PAGE
10-2-2001_9:44

PROJECT
CFEBVTX
FILE
PAGE
CFEBVTX . 21

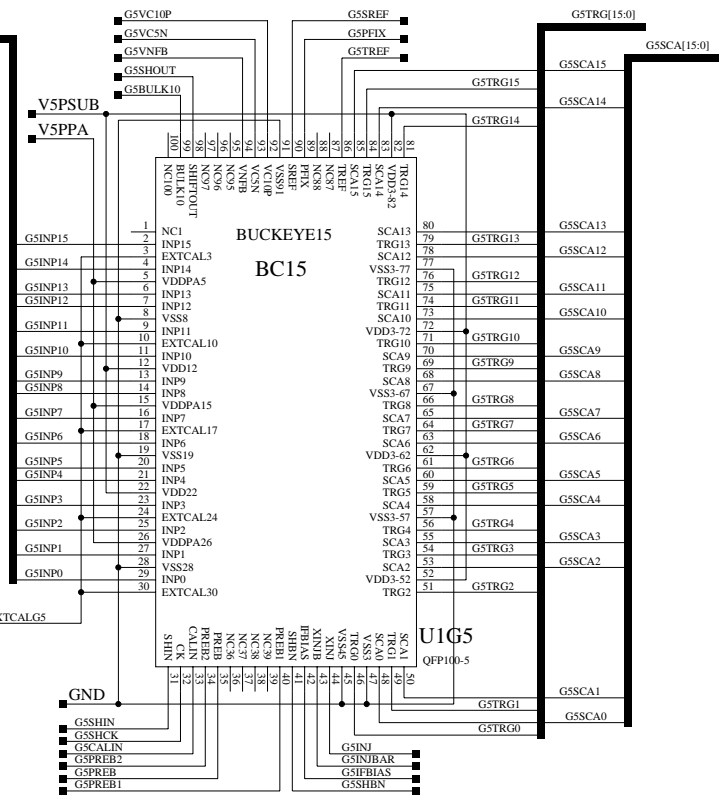
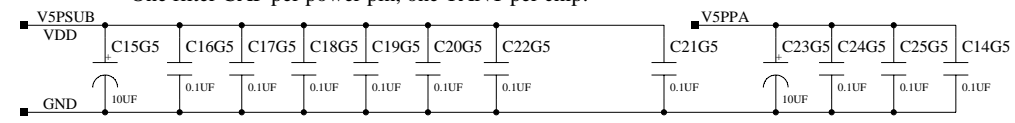
Free CAP nos:
 Norm: 185-
 Spec G: 110-
 Free RES nos:
 Norm: 87-91,97-
 Spec G: 41-
 Free UNIT nos:
 Norm: 47-
 Spec G: 19-
 Free JUMPER nos:
 Norm: 31-
 Spec G: 8-



CALABRATION CAP ADDED TO EACH CHANNEL

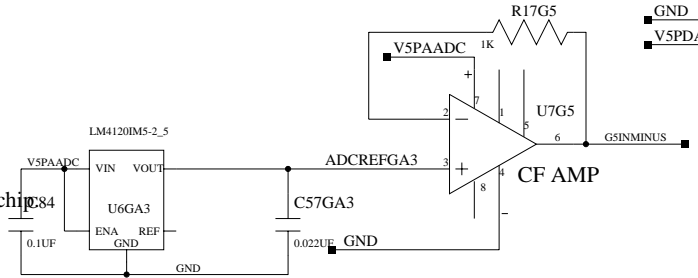
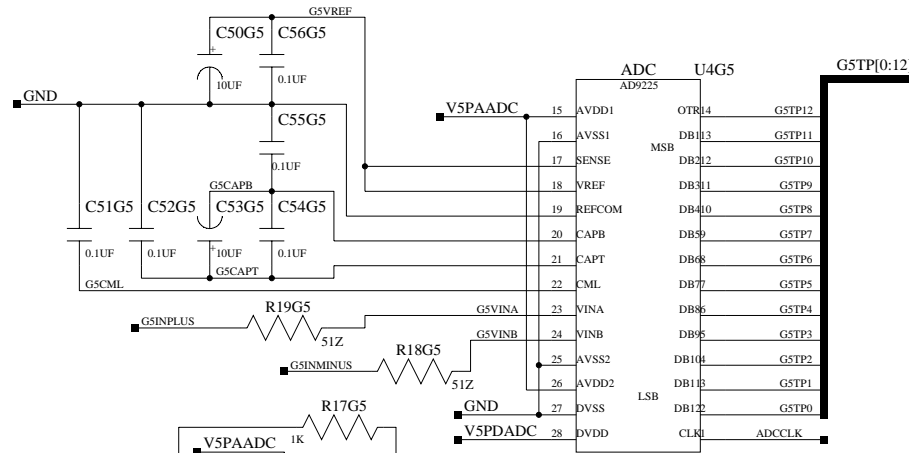


One filter CAP per power pin, one TANT per chip.



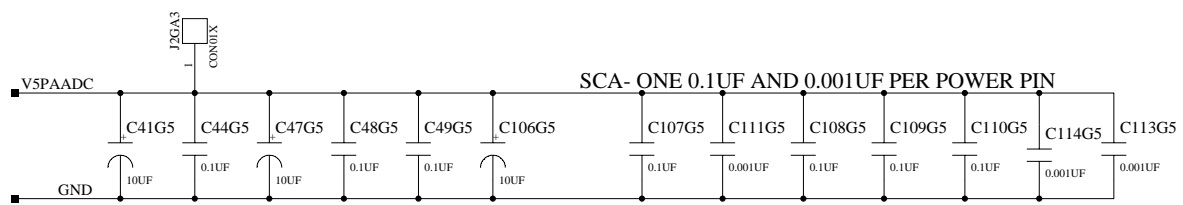
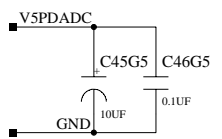
Group G5
 CFEBVTX

The 'B' signals are for in between pairs.



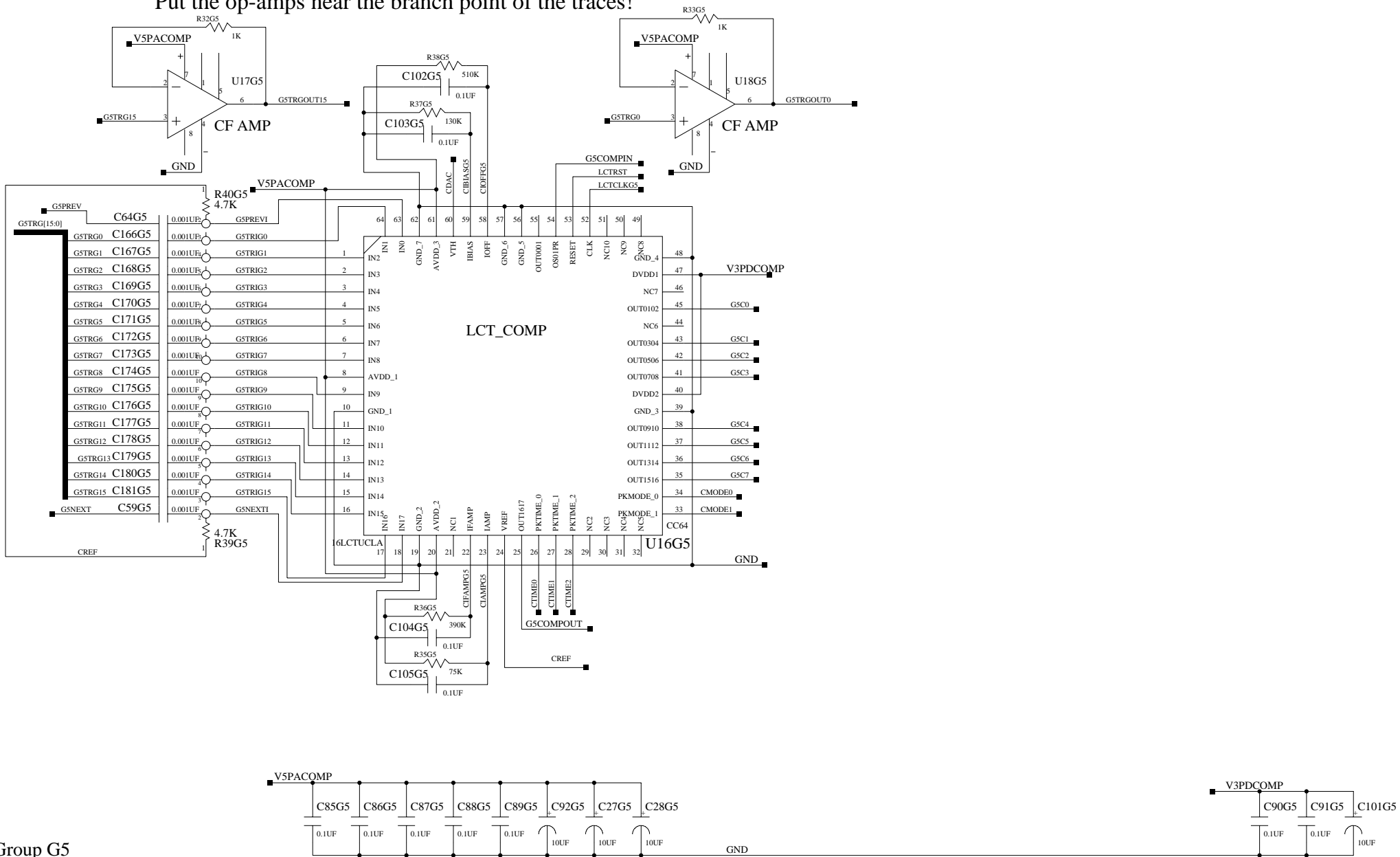
Watch placement of ADCCLK termination!

Generally, one filter CAP per power pin, one TANT per chip



Group G5 (and GA3)

Put the op-amps near the branch point of the traces!



Group G5

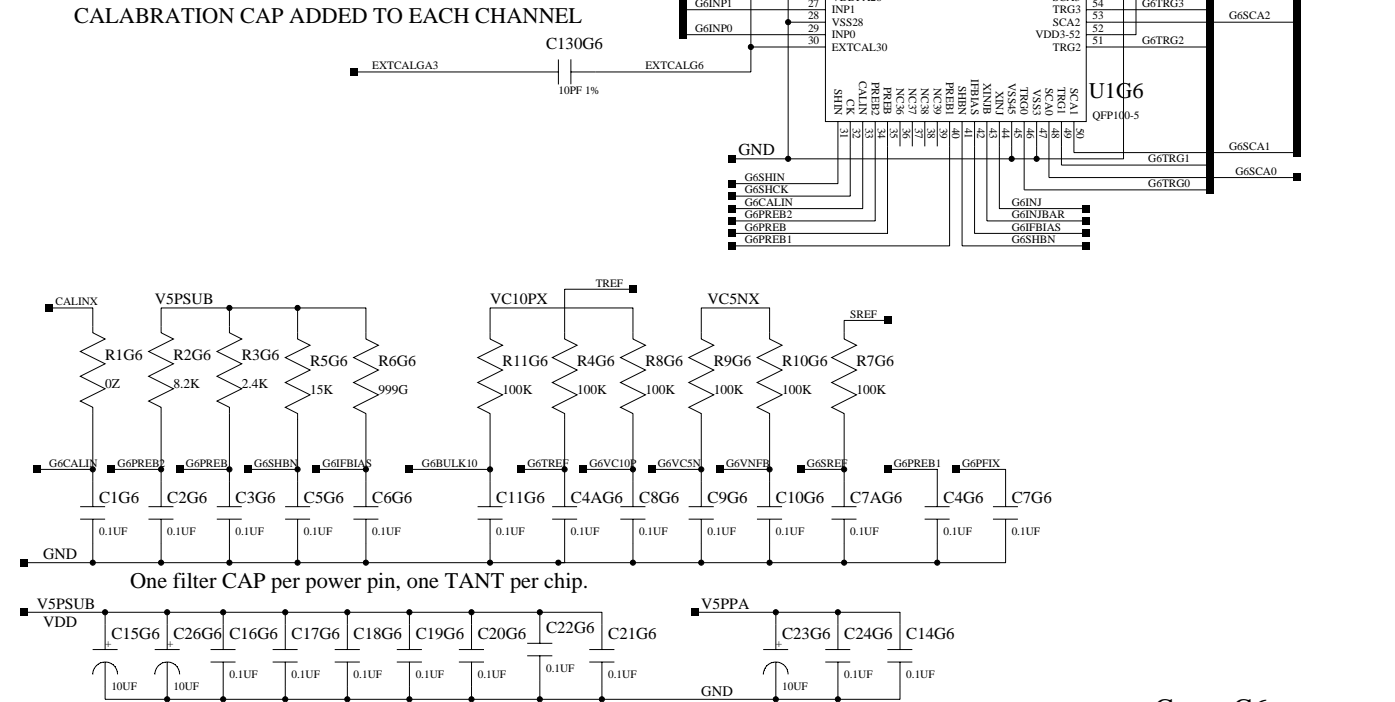
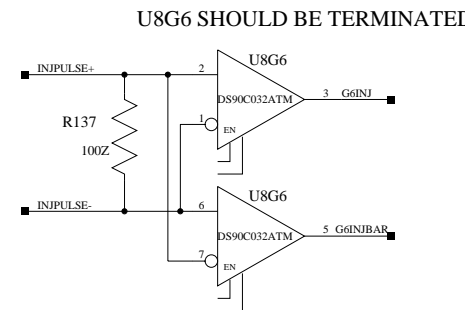
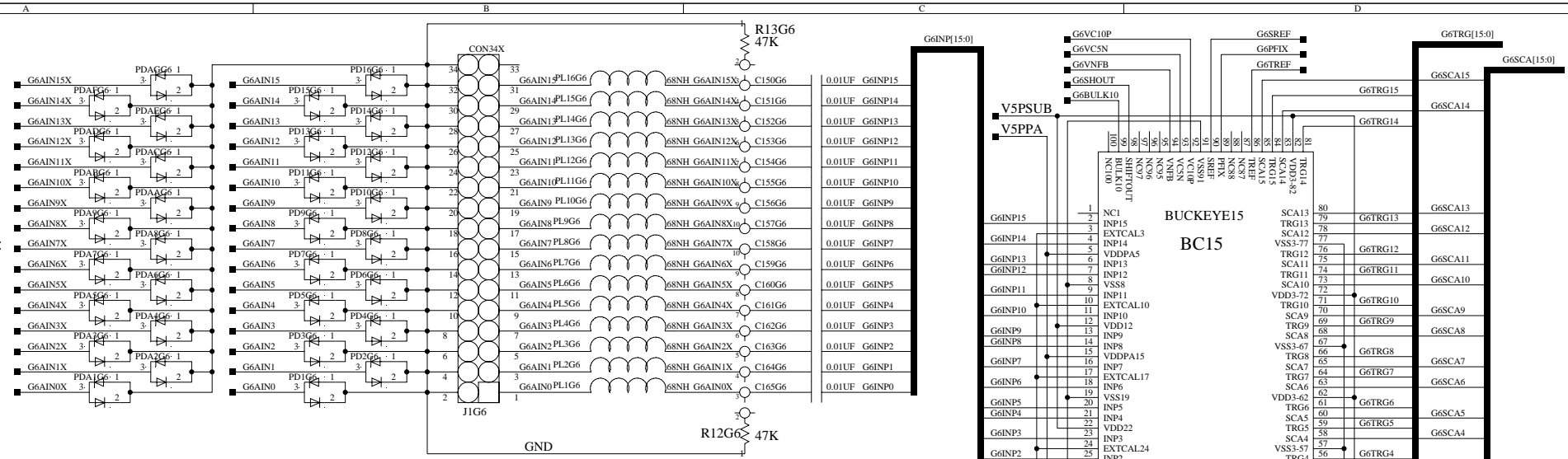
THE OHIO STATE UNIVERSITY
PHYSICS DEPARTMENT ELECTRONICS LAB
174 WEST 18TH AVE. COLUMBUS OH 43210

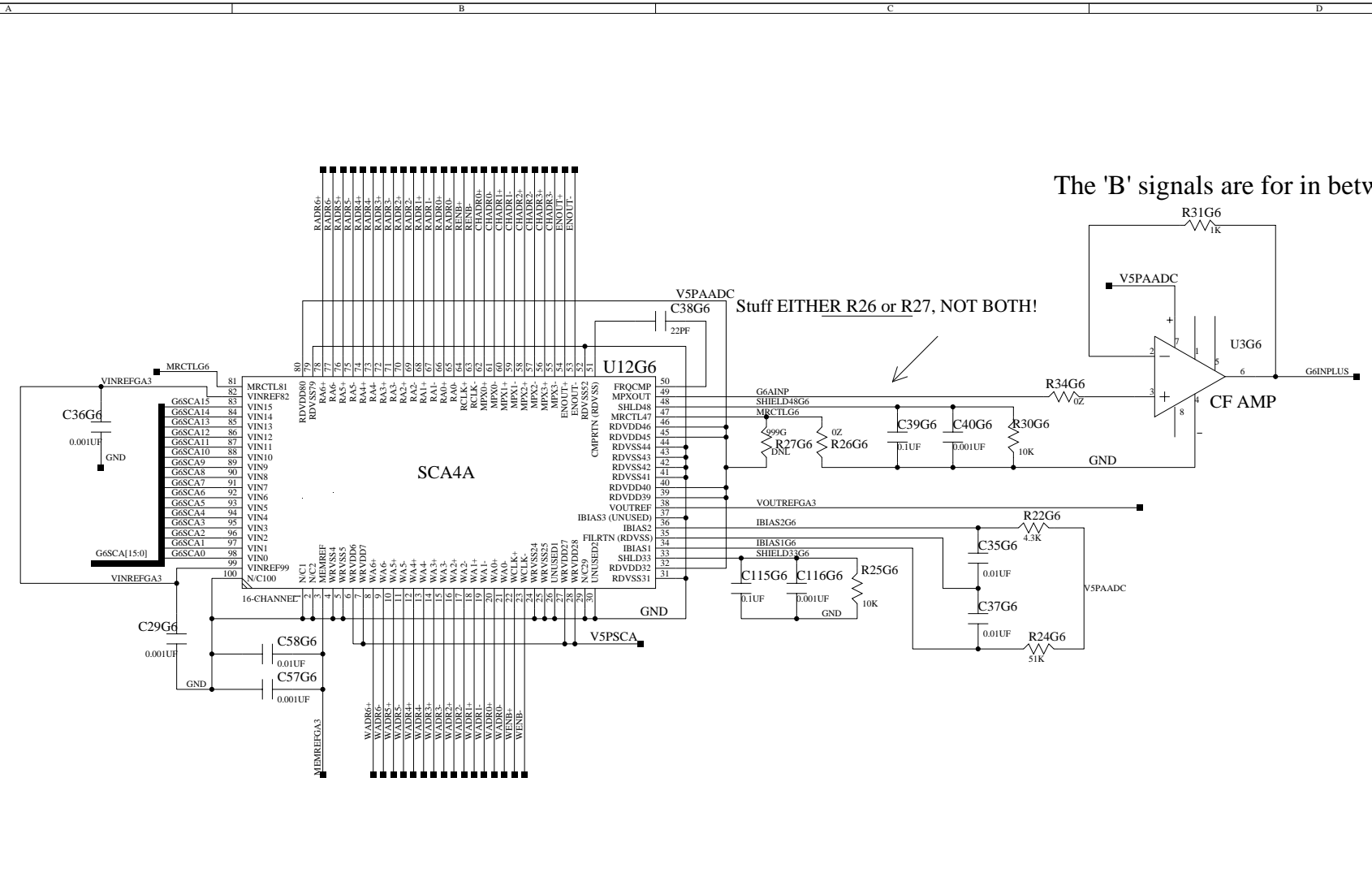
TITLE
Cathode Comparator System
Cathode Front End Card
CMS CSC Electronics

BY G
DATE
PARENT PAGE
PROJECT
FILE
10-2-2001_9:44

V3PDCOMP
C90G5 C91G5 C101G5
0.1UF 0.1UF 10UF
PROJECT
CFEBVTX
PAGE
CFEBVTX . 25

Free CAP nos:
 Norm: 185-
 Spec G: 110-
 Free RES nos:
 Norm: 87-91,97-
 Spec G: 41-
 Free UNIT nos:
 Norm: 47-
 Spec G: 19-
 Free JUMPER nos:
 Norm: 31-
 Spec G: 8-

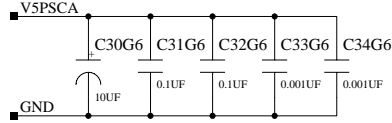




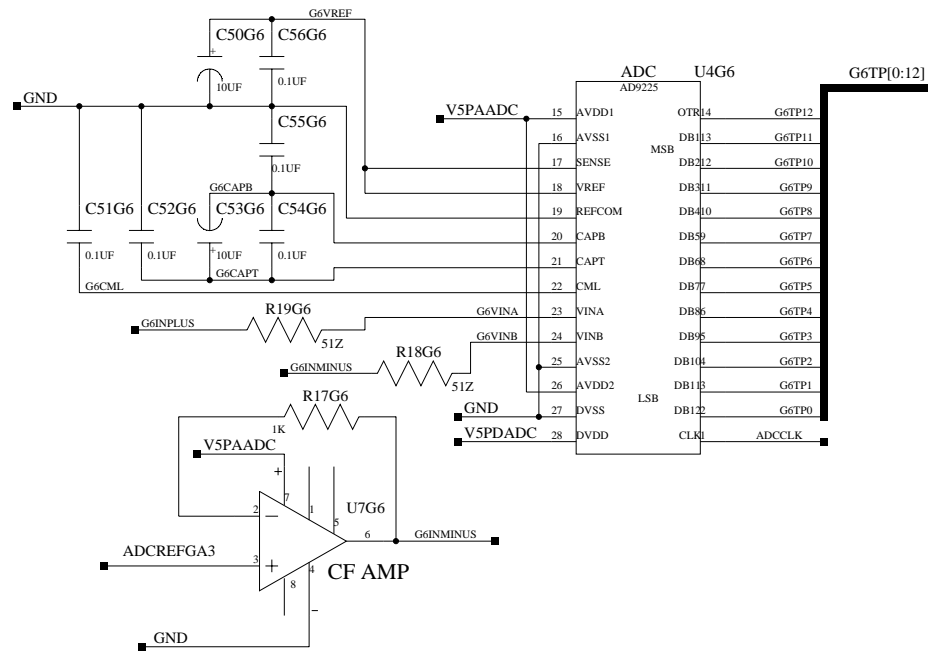
The 'B' signals are for in between pairs.

Stuff EITHER R26 or R27, NOT BOTH!

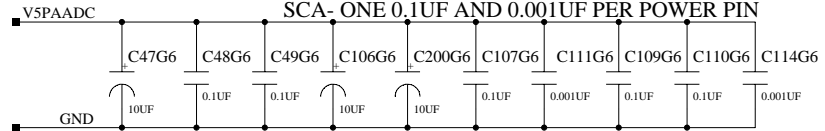
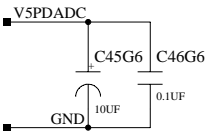
SCA ONE 0.1UF AND 0.001UF PER POWER PIN



Group G6 (and GA3)

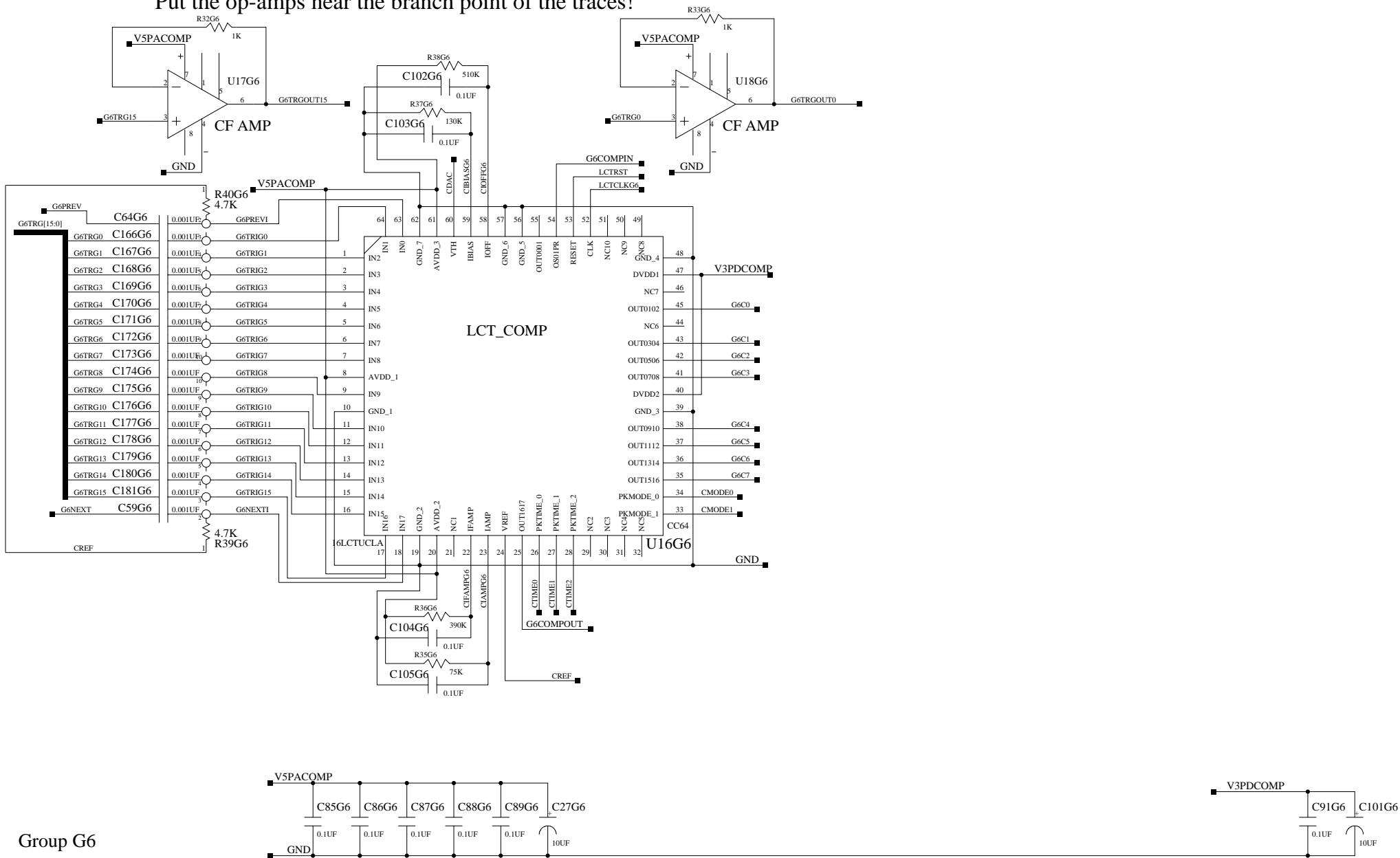


Generally, one filter CAP per power pin, one TANT per chip.



Group G6 (and GA3)

Put the op-amps near the branch point of the traces!



Group G6