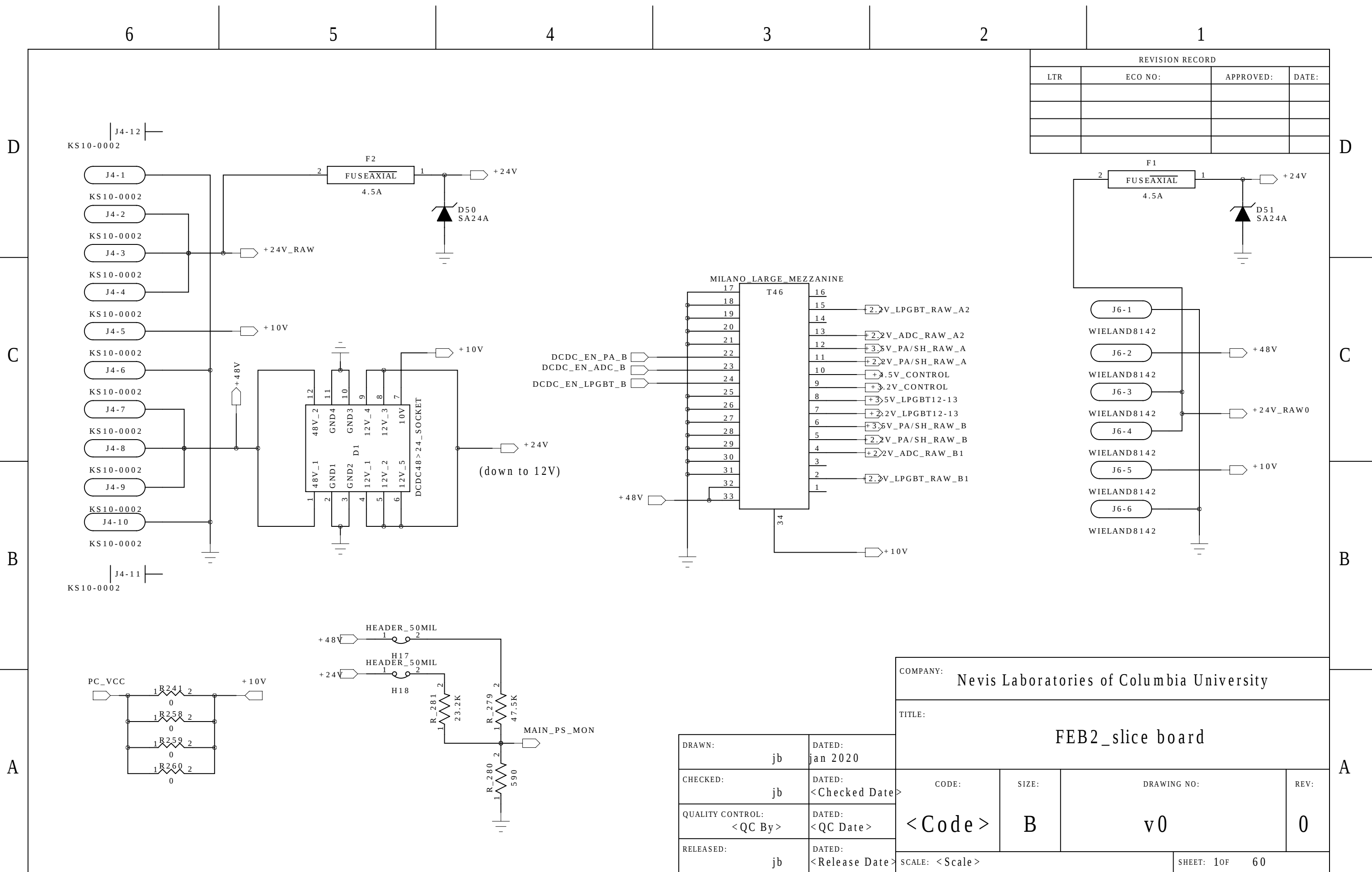




D

C

B

A

6

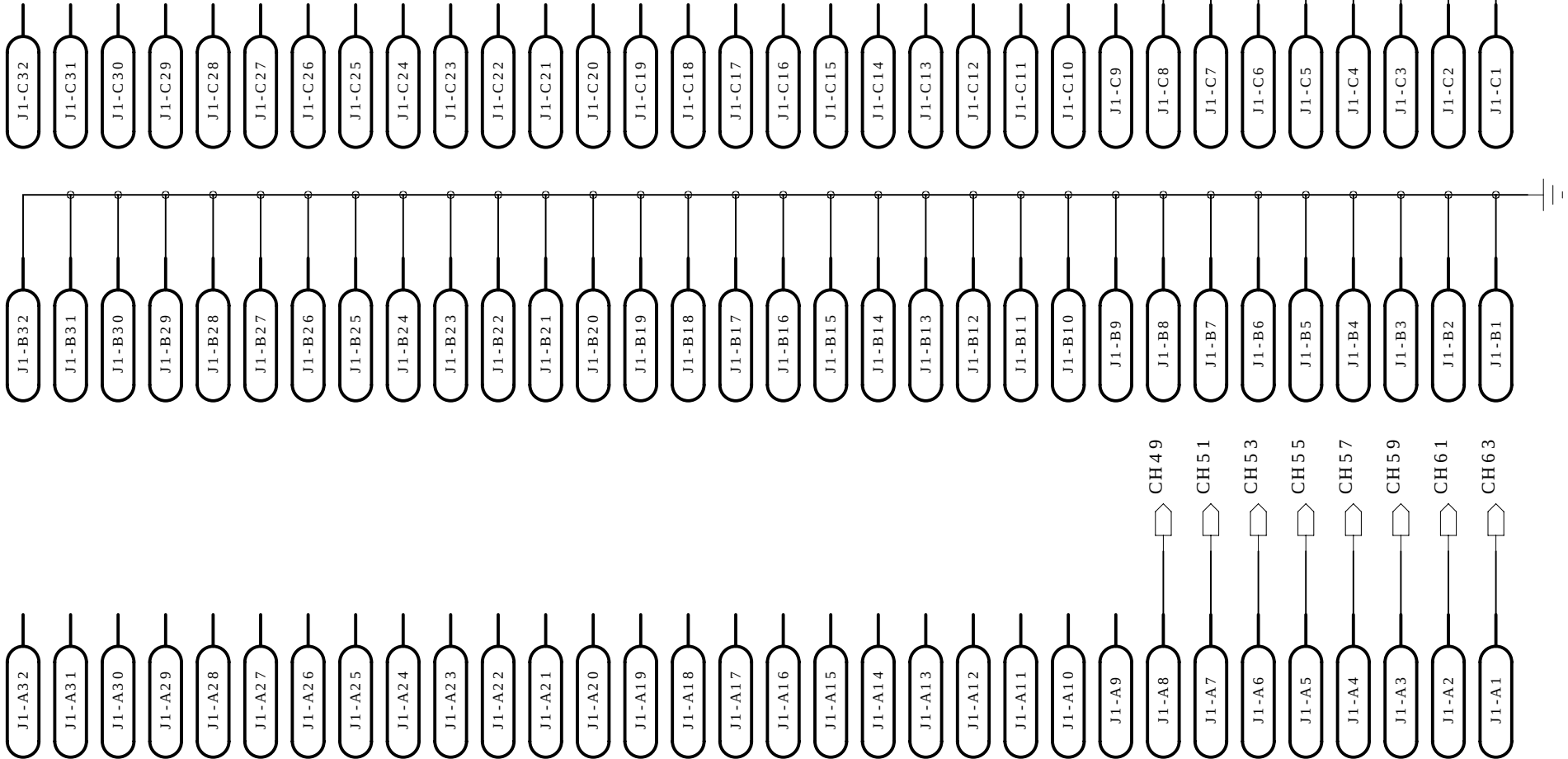
5

4

3

2

1



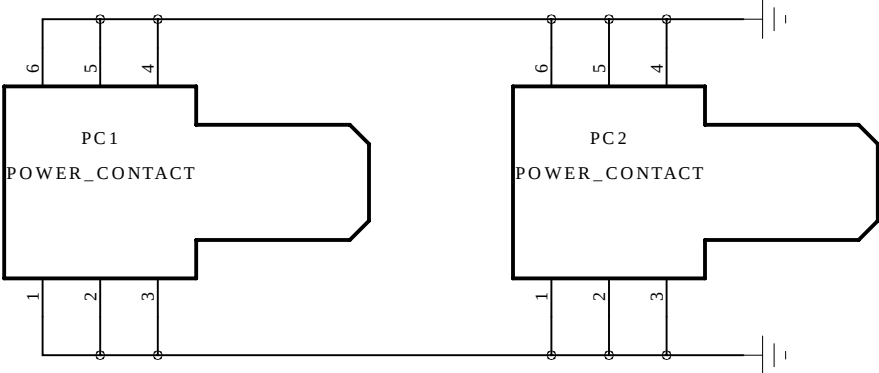
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

C

B

A



DRAWN:	jb	DATED:	jan 2020
CHECKED:	jb	DATED:	<Checked Date>
QUALITY CONTROL:	<QC By>	DATED:	<QC Date>
RELEASED:	jb	DATED:	<Release Date>

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 20F 60

D

C

B

A

6

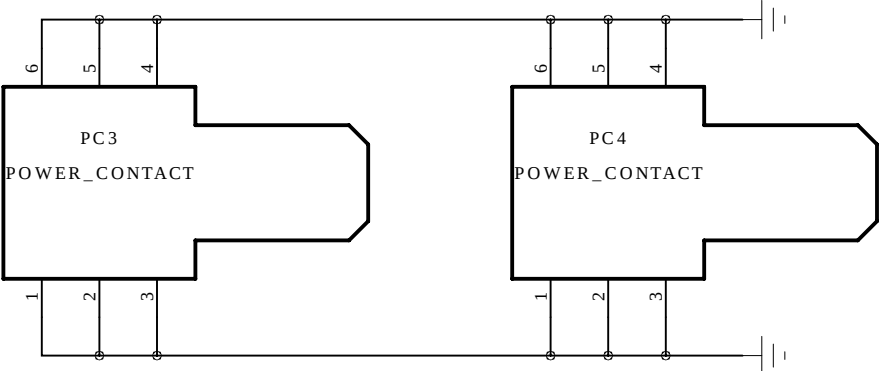
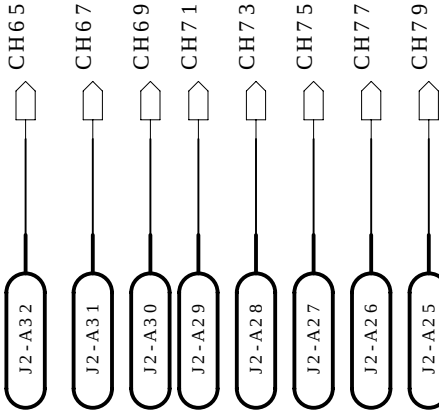
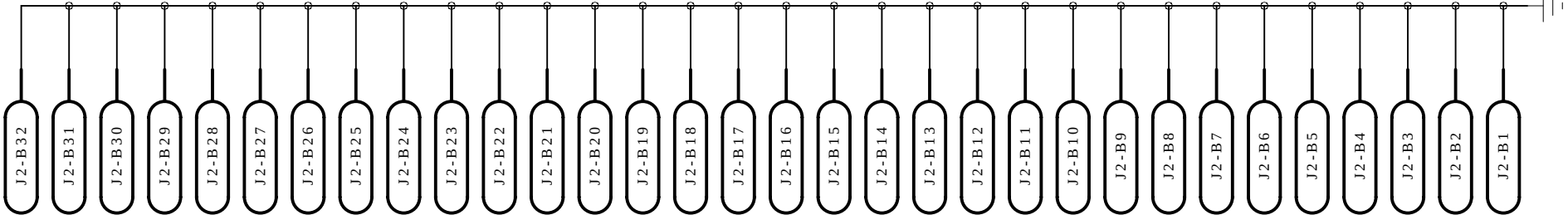
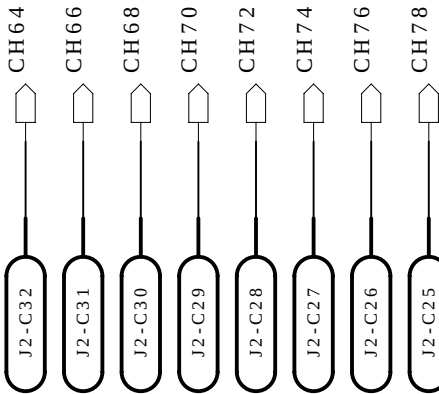
5

4

3

2

1



DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>			SHEET: 3 of 60

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

C

B

A

D

C

B

A

6

5

4

3

2

1

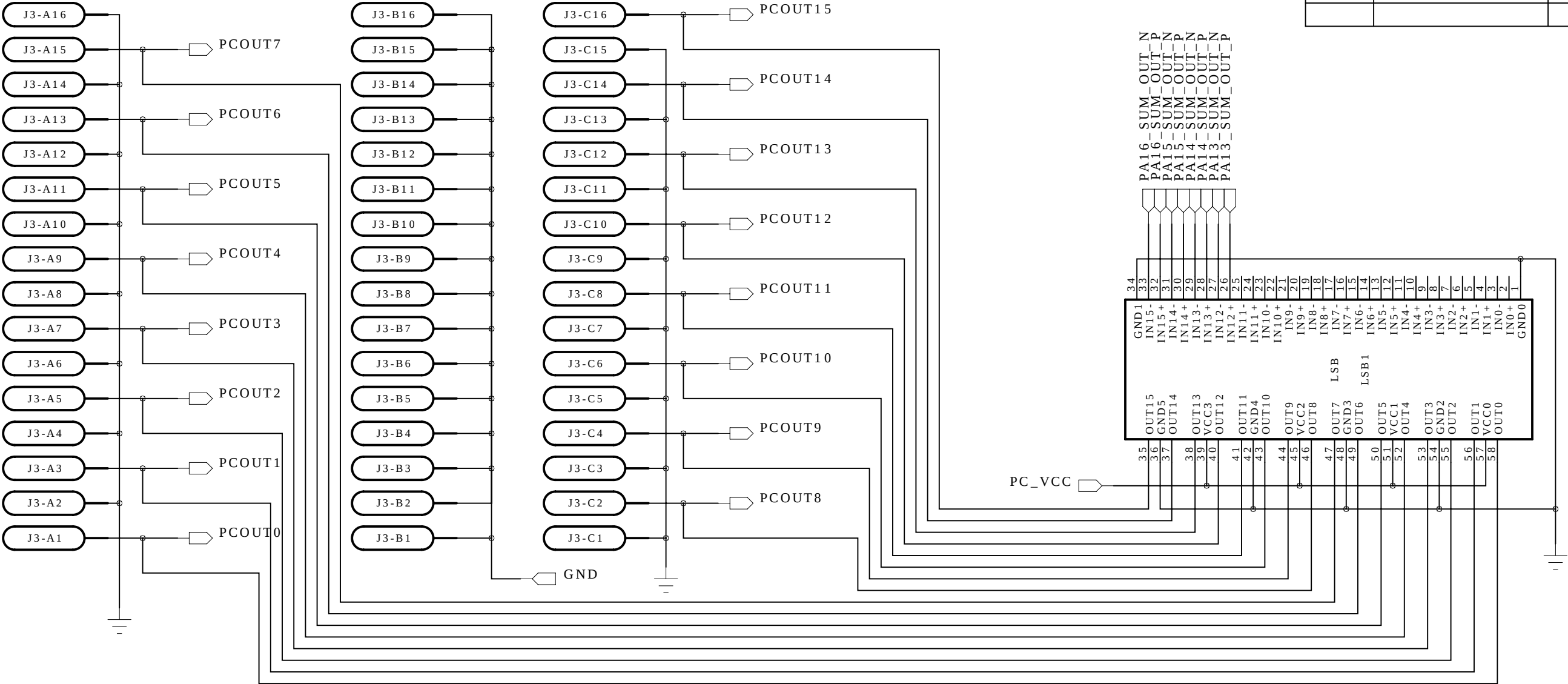
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

C

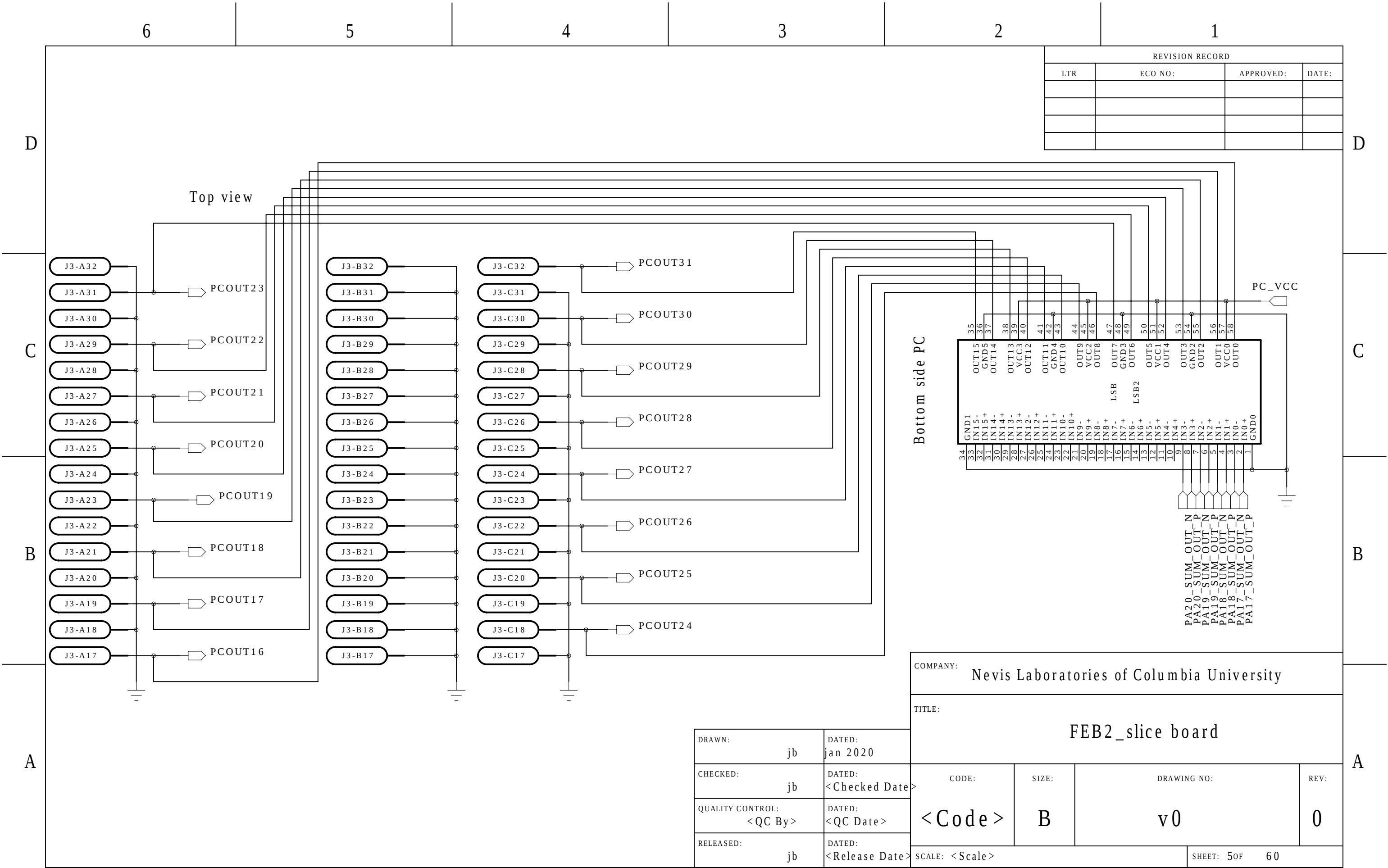
B

A



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 4of 60	

DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>



PCOUT24

PCOUT25

PCOUT26

PCOUT27

PCOUT28

PCOUT29

PCOUT30

PCOUT31

COMPANY: Nevis Laboratories of Columbia University

TITLE: FEB2_slice board

CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0

SCALE: <Scale>

SHEET: 50F 60

DRAWN: jb

CHECKED: jb

QUALITY CONTROL: <QC By>

RELEASED: jb

DATED: jan 2020

DATED: <Checked Date>

DATED: <QC Date>

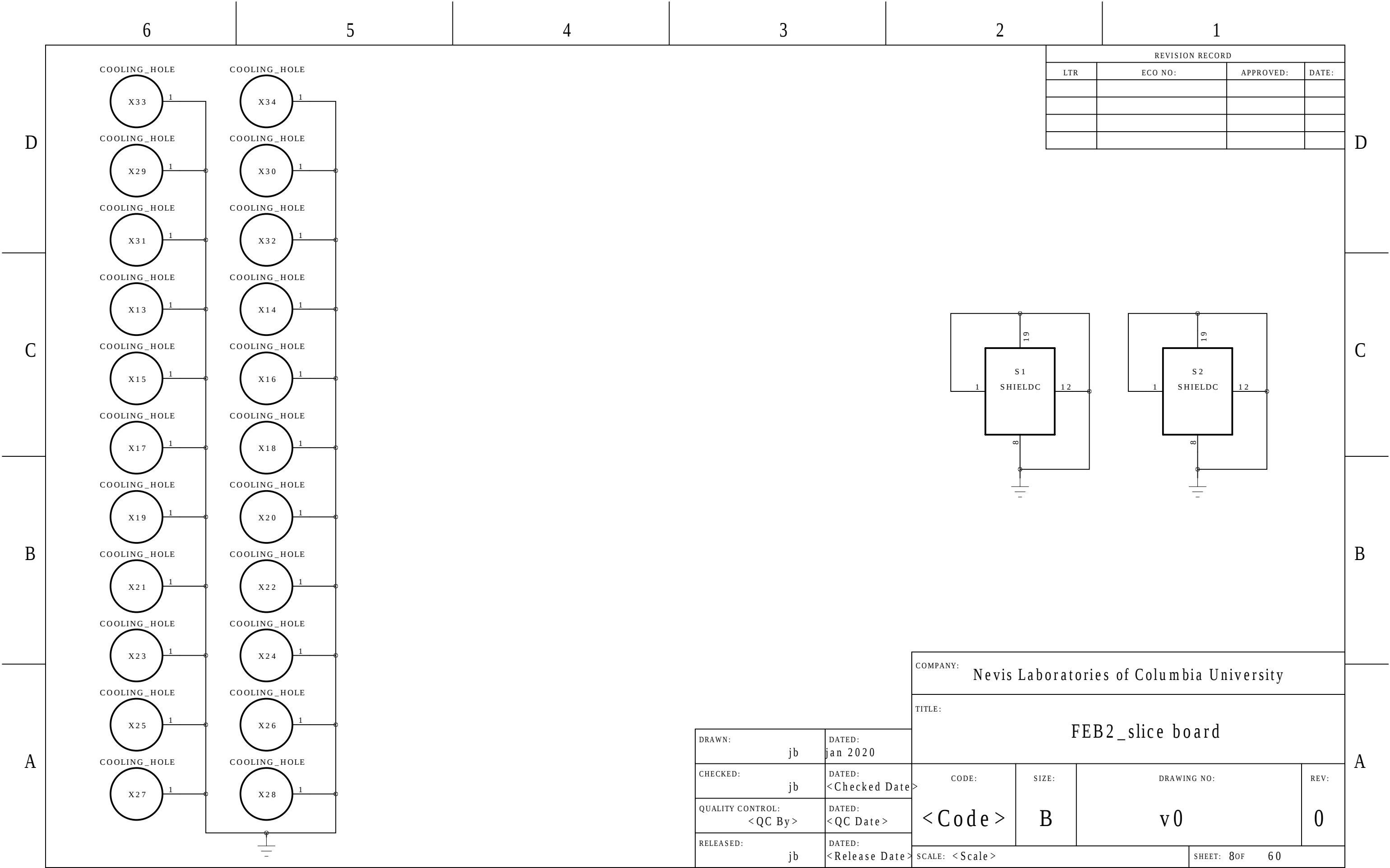
DATED: <Release Date>

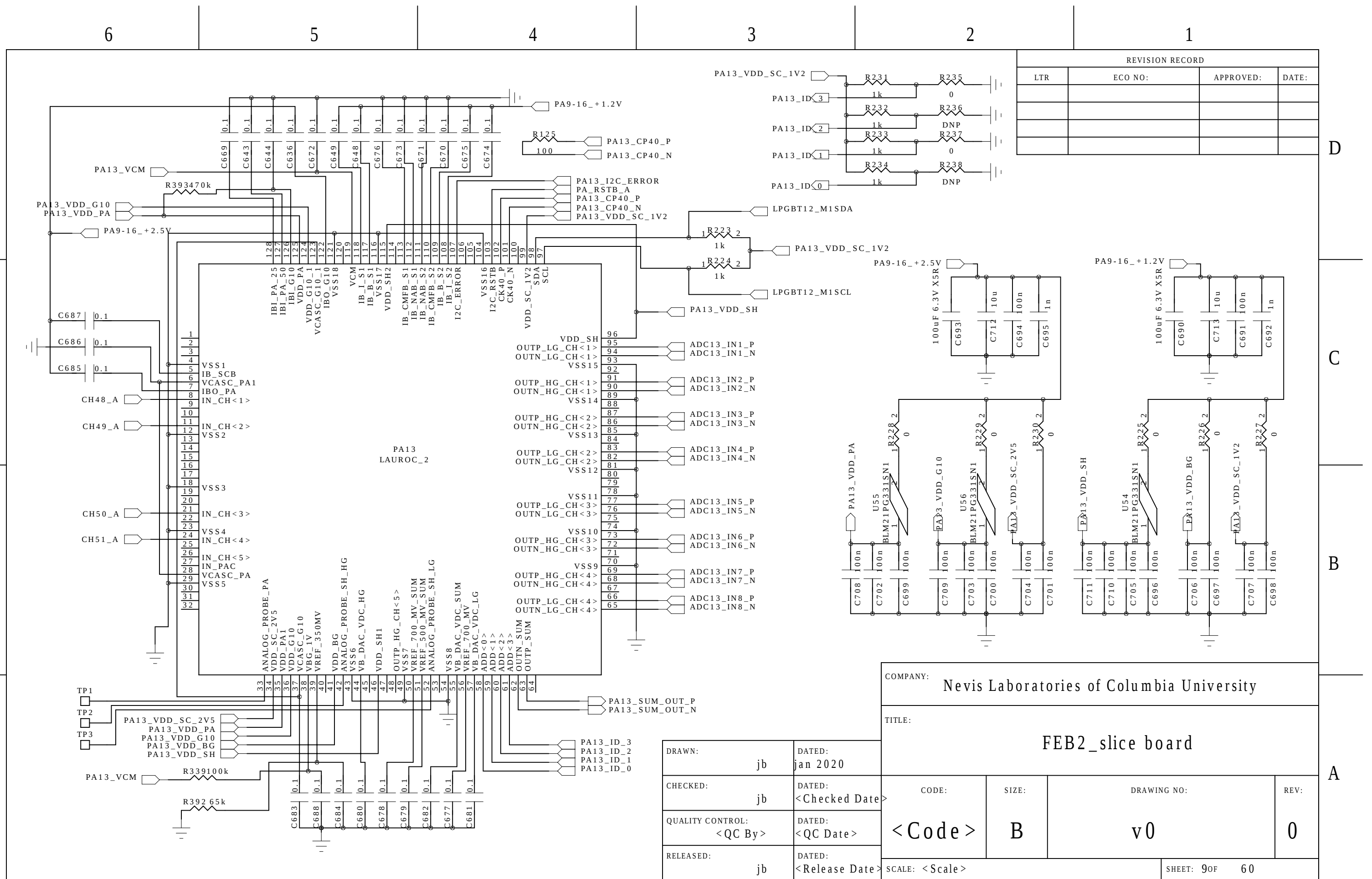
A

B

C

D



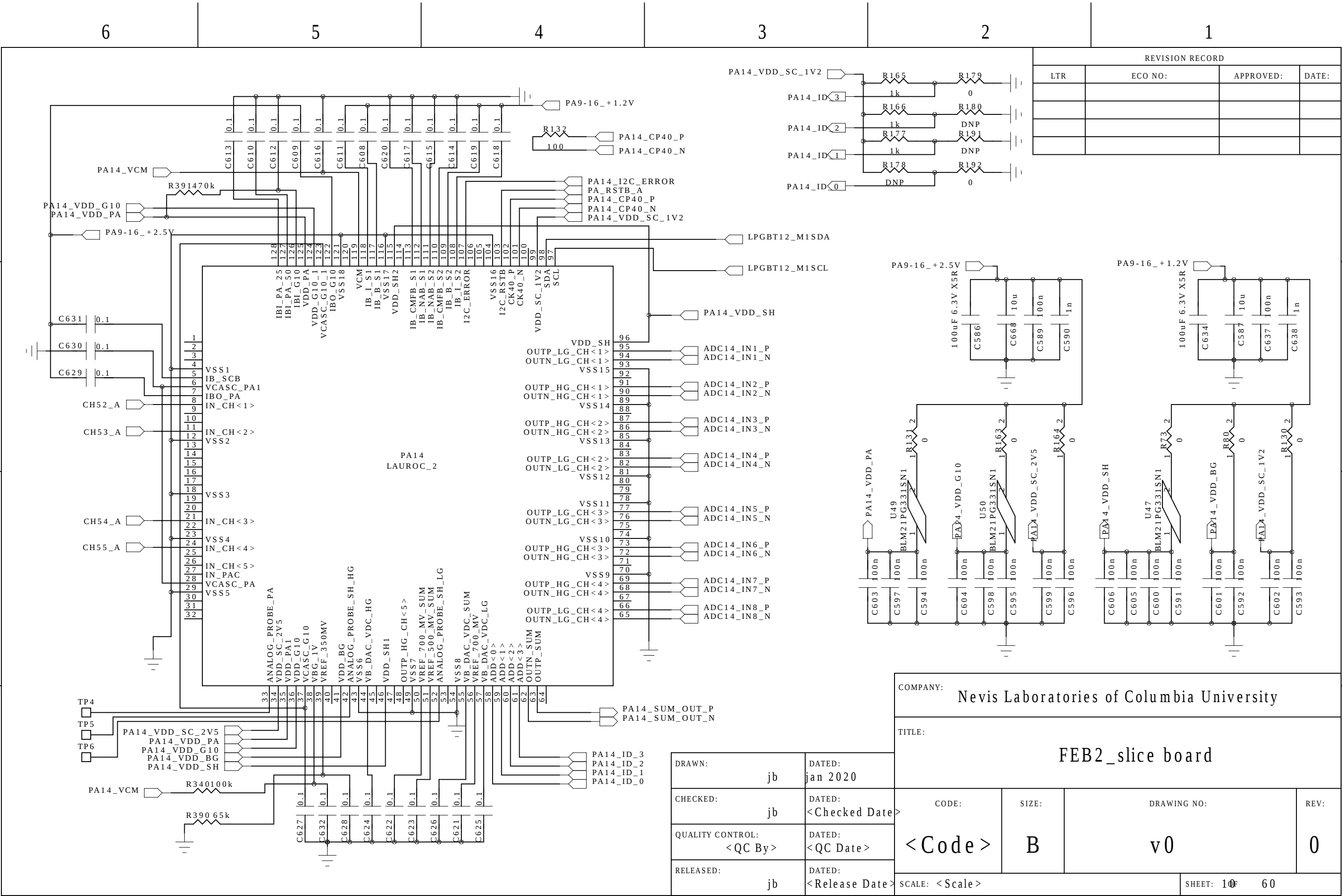


D

C

B

A

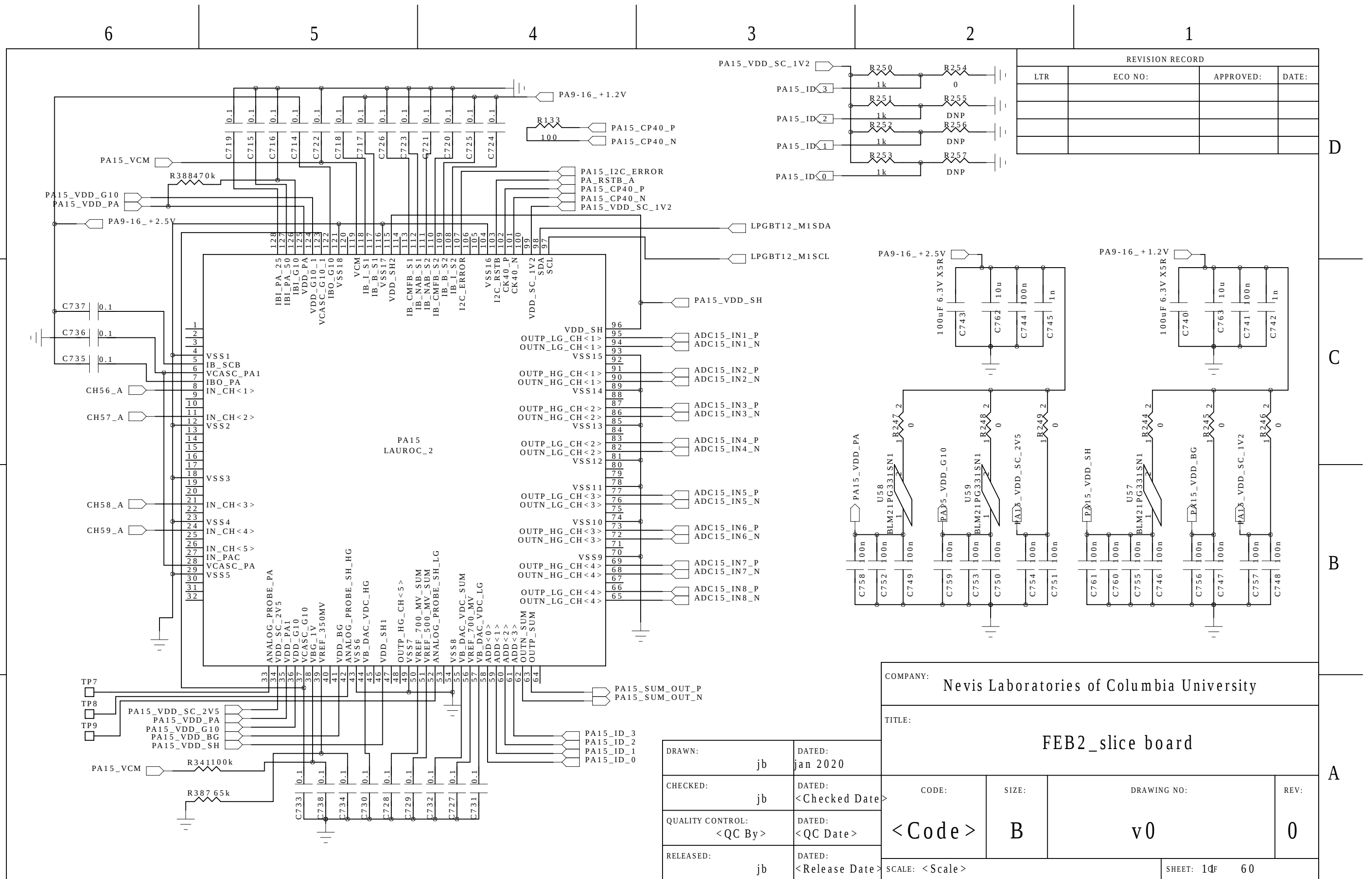


D

C

B

A

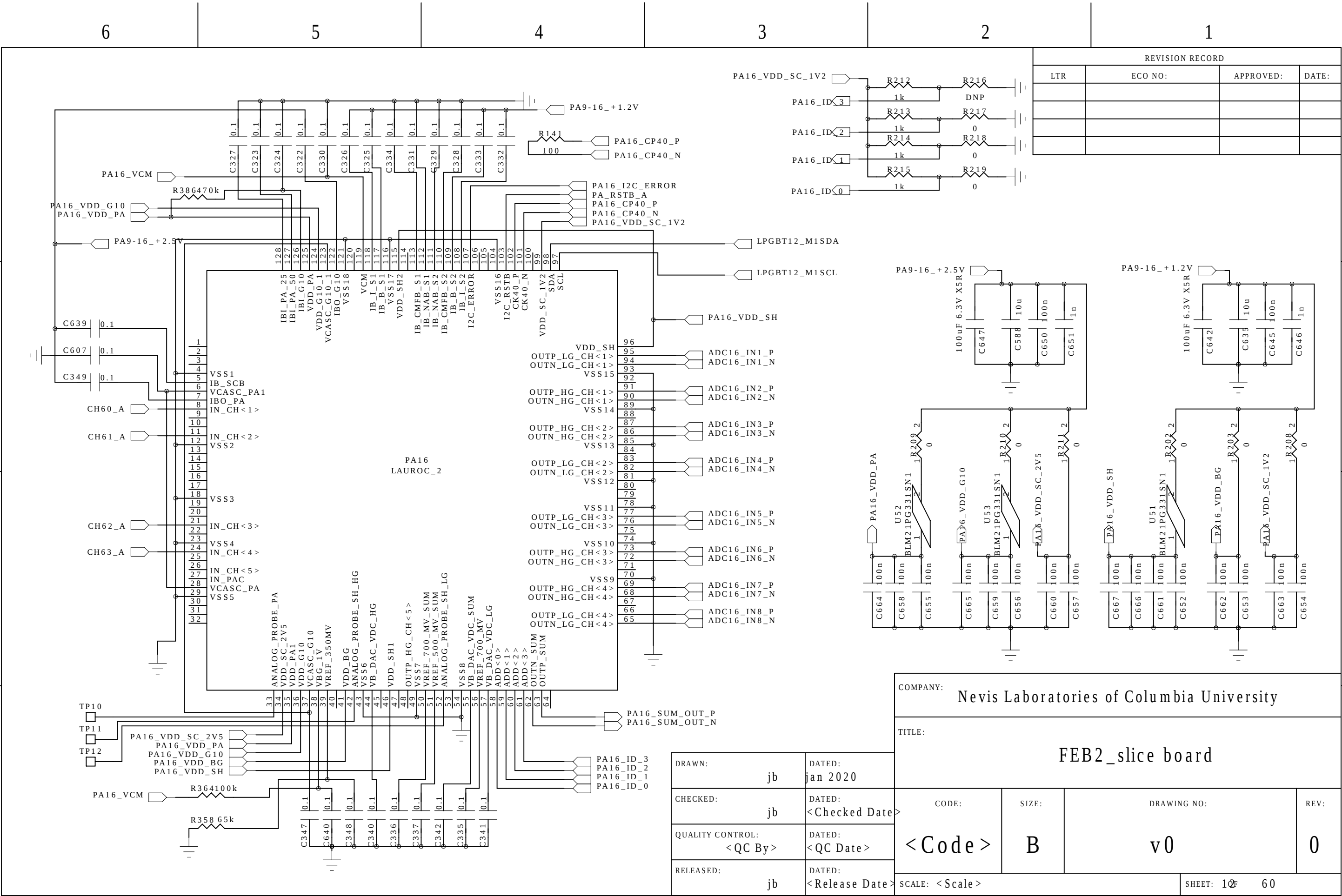


D

C

B

A



DRAWN:	jb	DATED:	jan 2020
CHECKED:	jb	DATED:	<Checked Date>
QUALITY CONTROL:	<QC By>	DATED:	<QC Date>
RELEASED:	jb	DATED:	<Release Date>

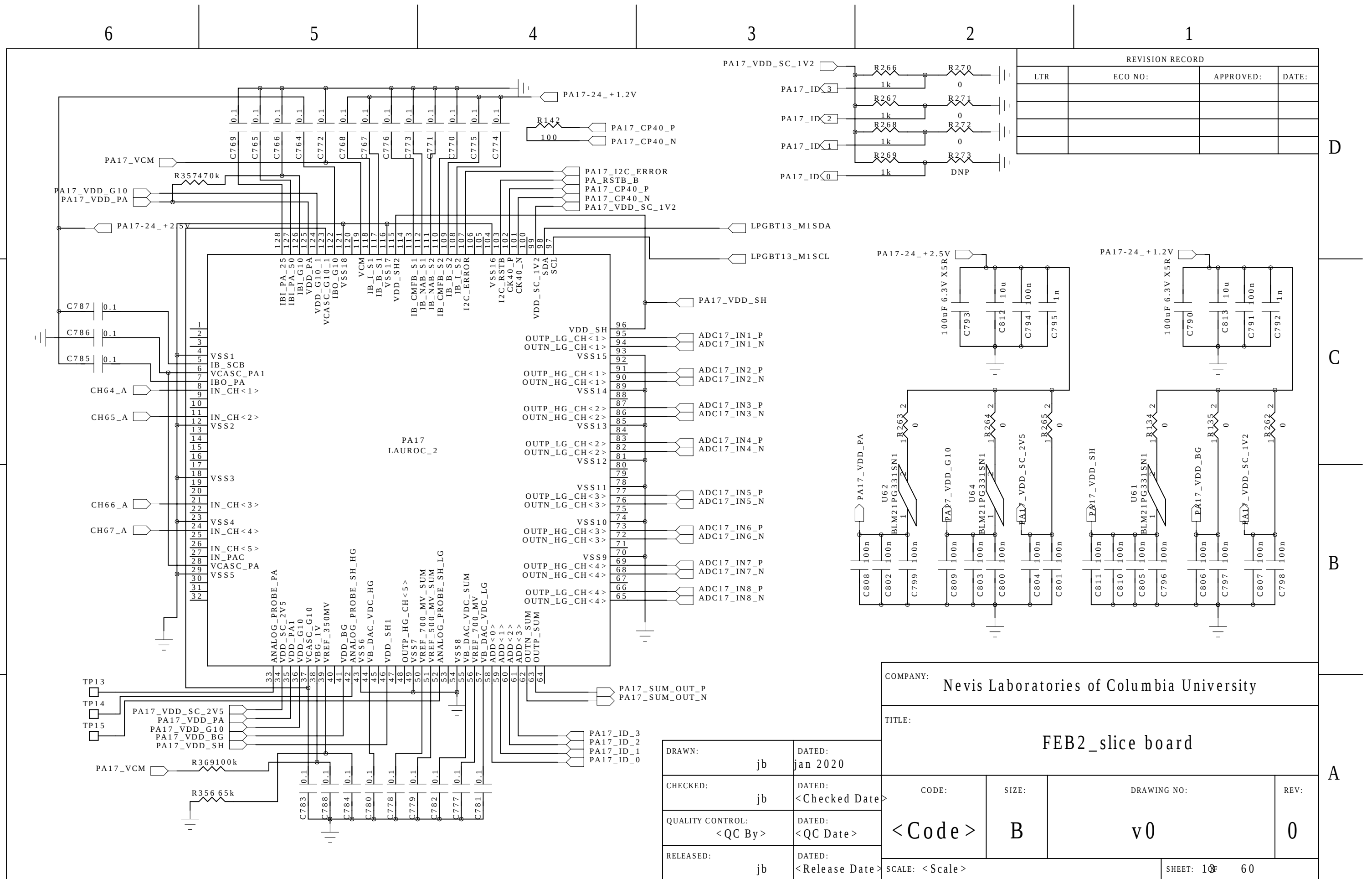
COMPANY: Nevis Laboratories of Columbia University				
TITLE: FEB2_slice board				
CODE:	SIZE:	DRAWING NO:	REV:	
<Code>	B	v0	0	
SCALE: <Scale>			SHEET: 10 60	

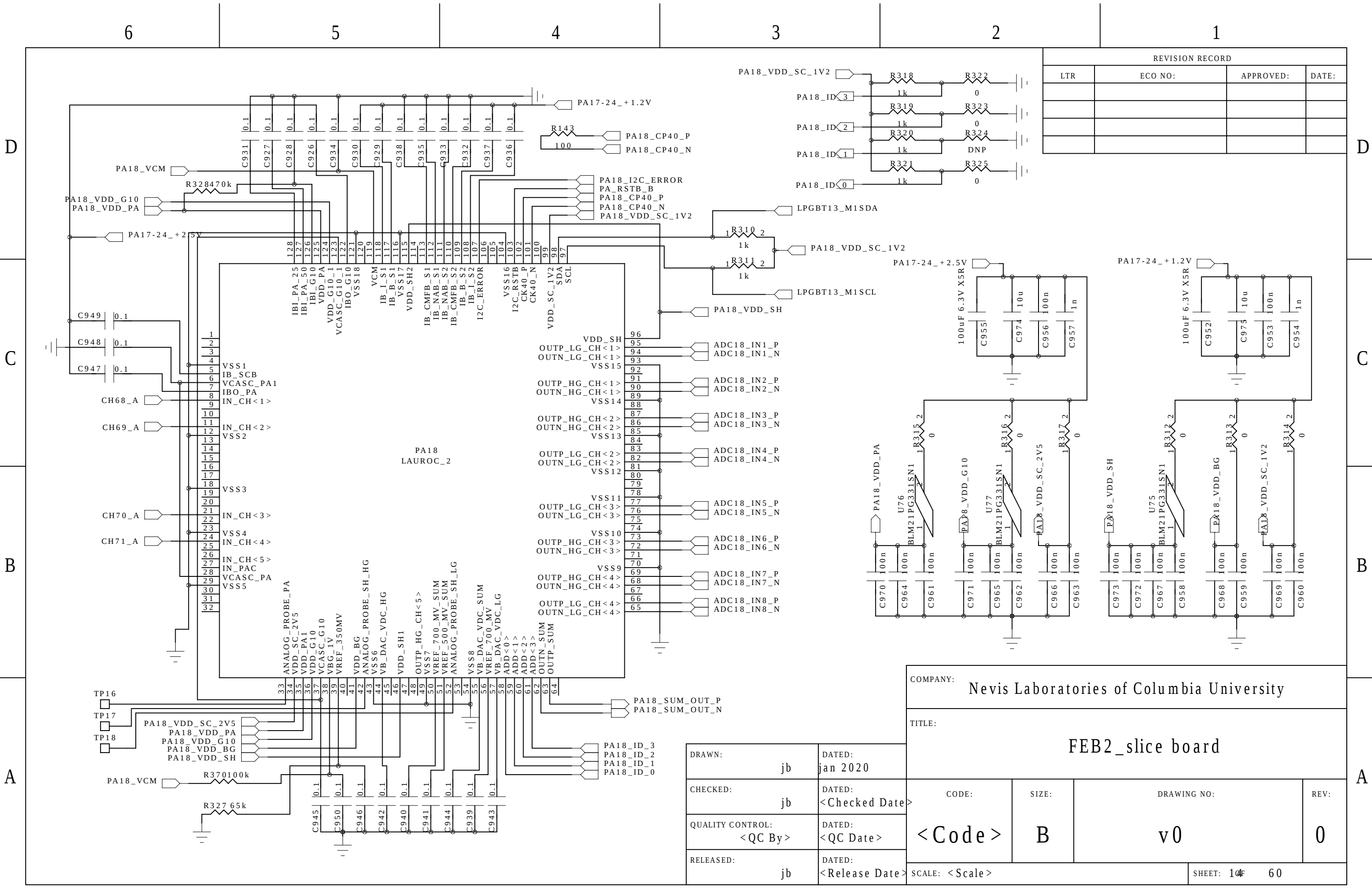
D

C

B

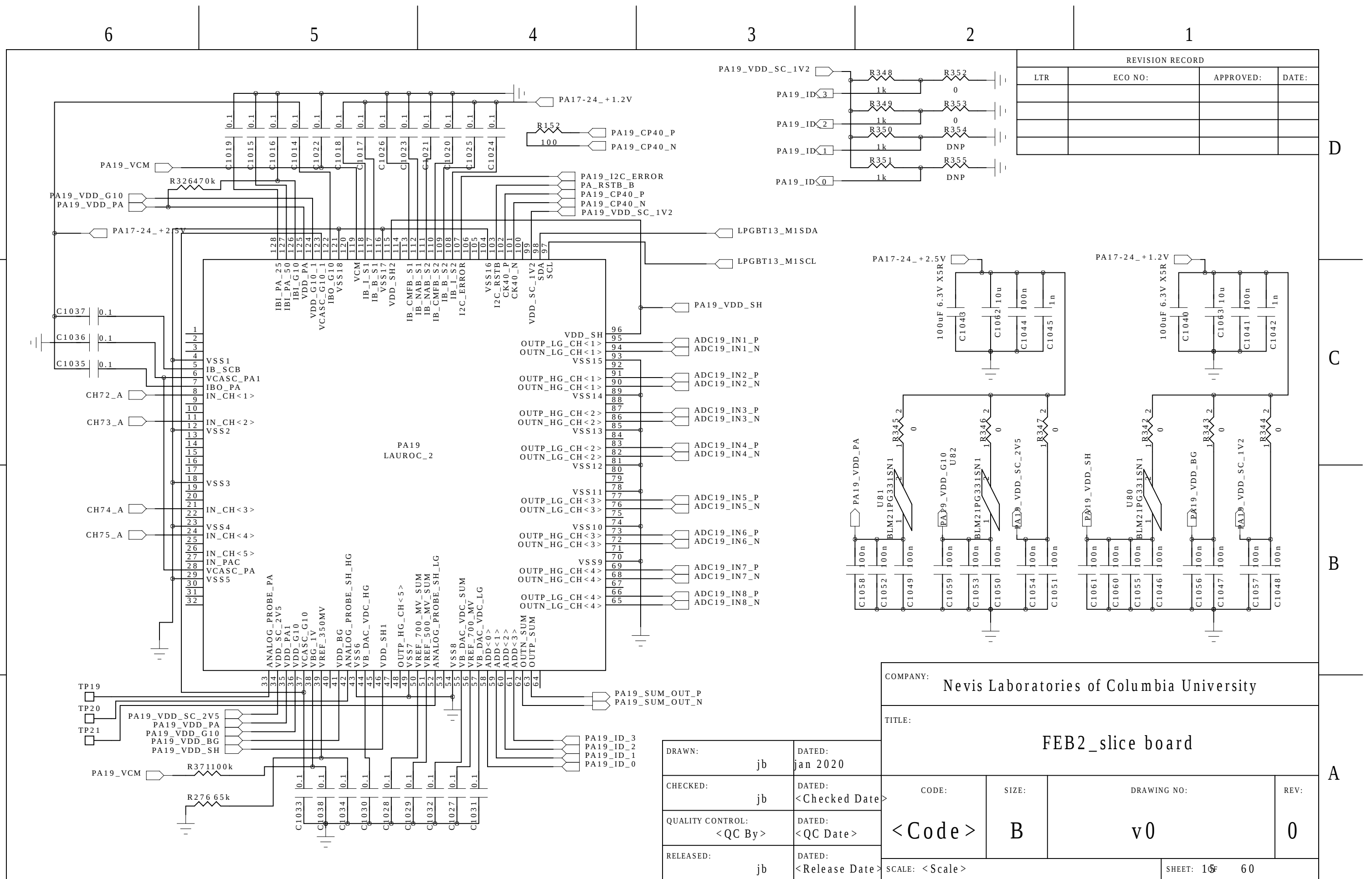
A





REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY: Nevis Laboratories of Columbia University				
TITLE: FEB2_slice board				
CHECKED: jb	DATED: <Checked Date>	CODE: <Code>	SIZE: B	DRAWING NO: v0
QUALITY CONTROL: <QC By>	DATED: <QC Date>			REV: 0
RELEASED: jb	DATED: <Release Date>	SCALE: <Scale>		SHEET: 1 of 60

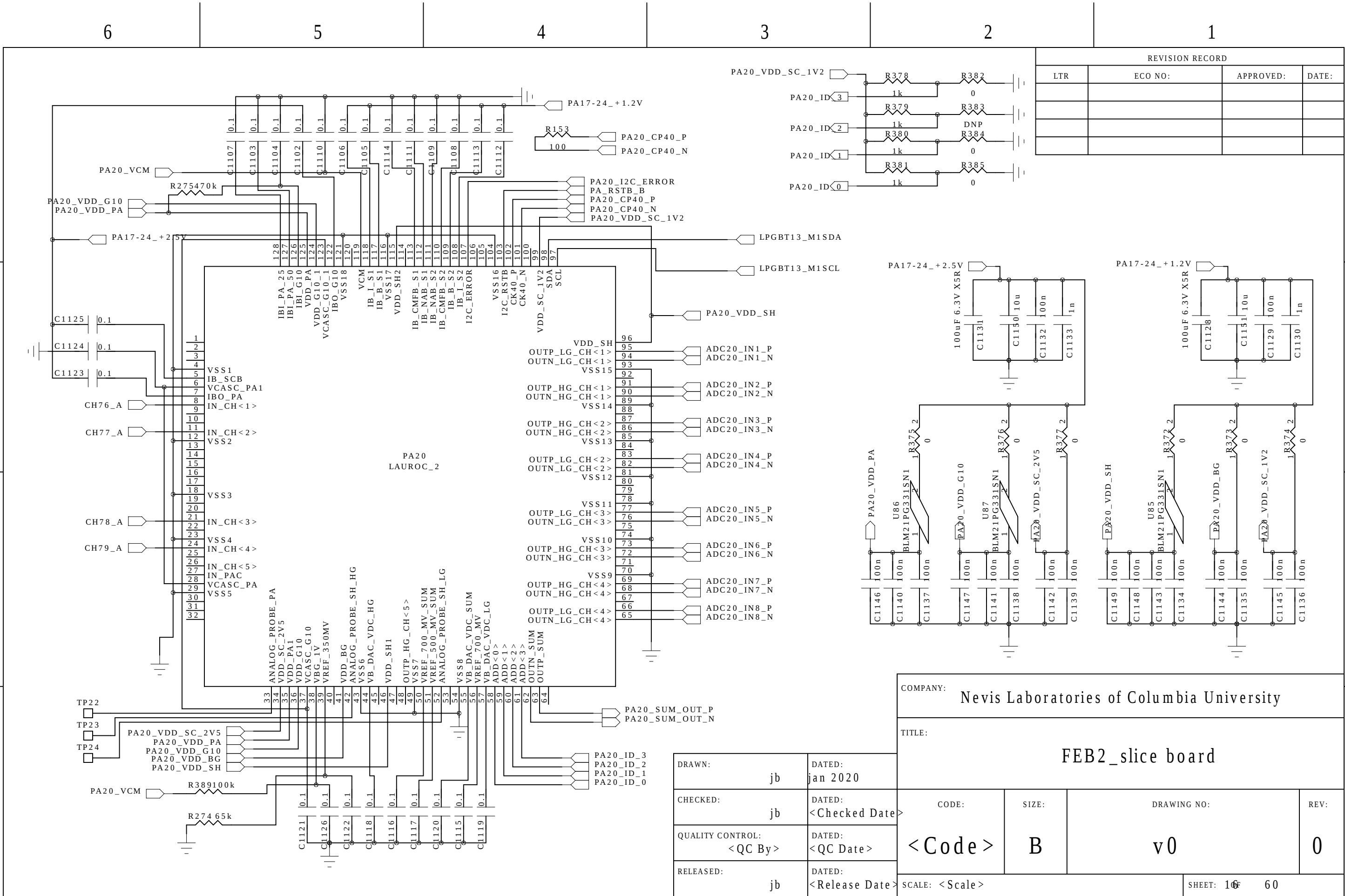


D

C

B

A

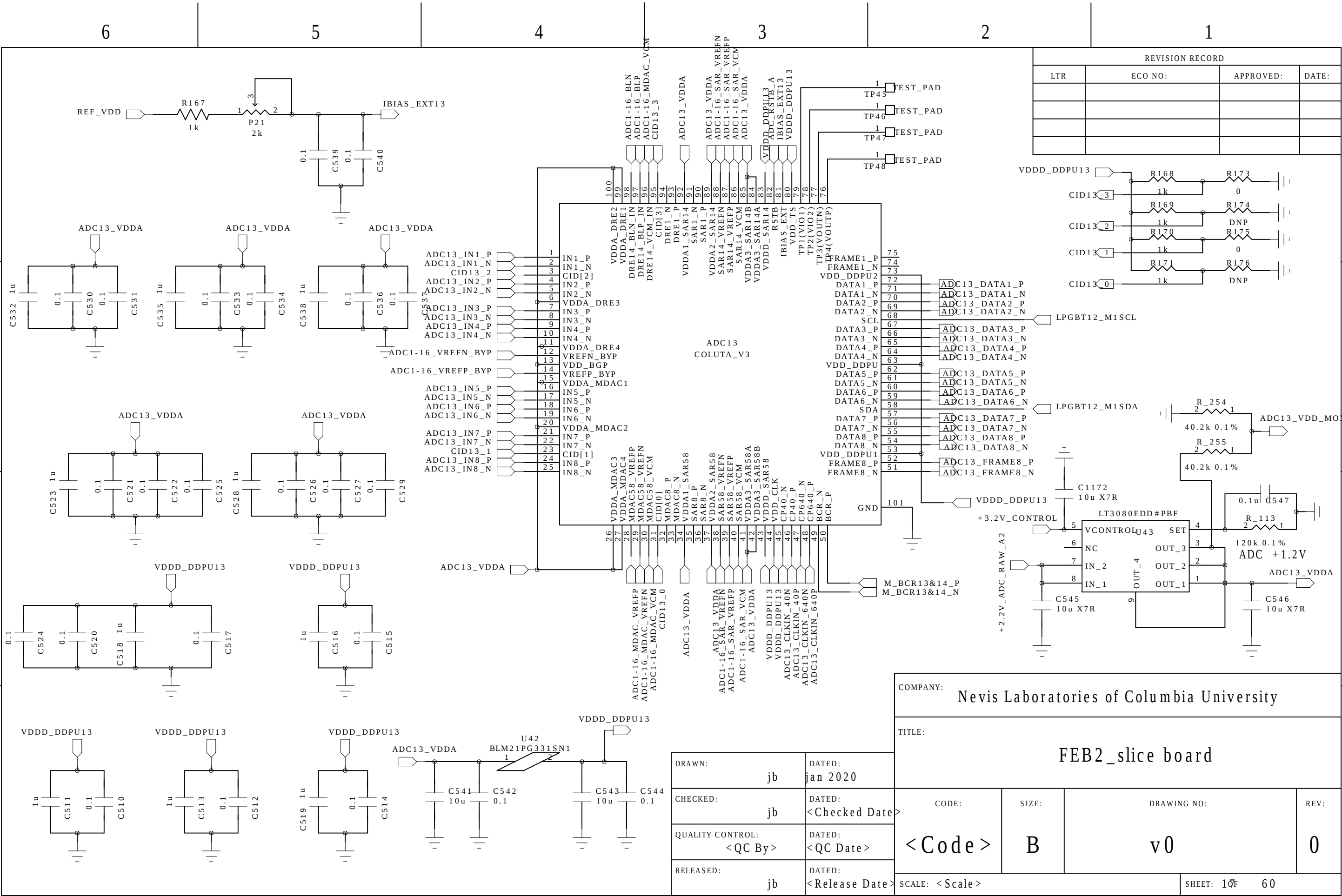


D

C

B

A

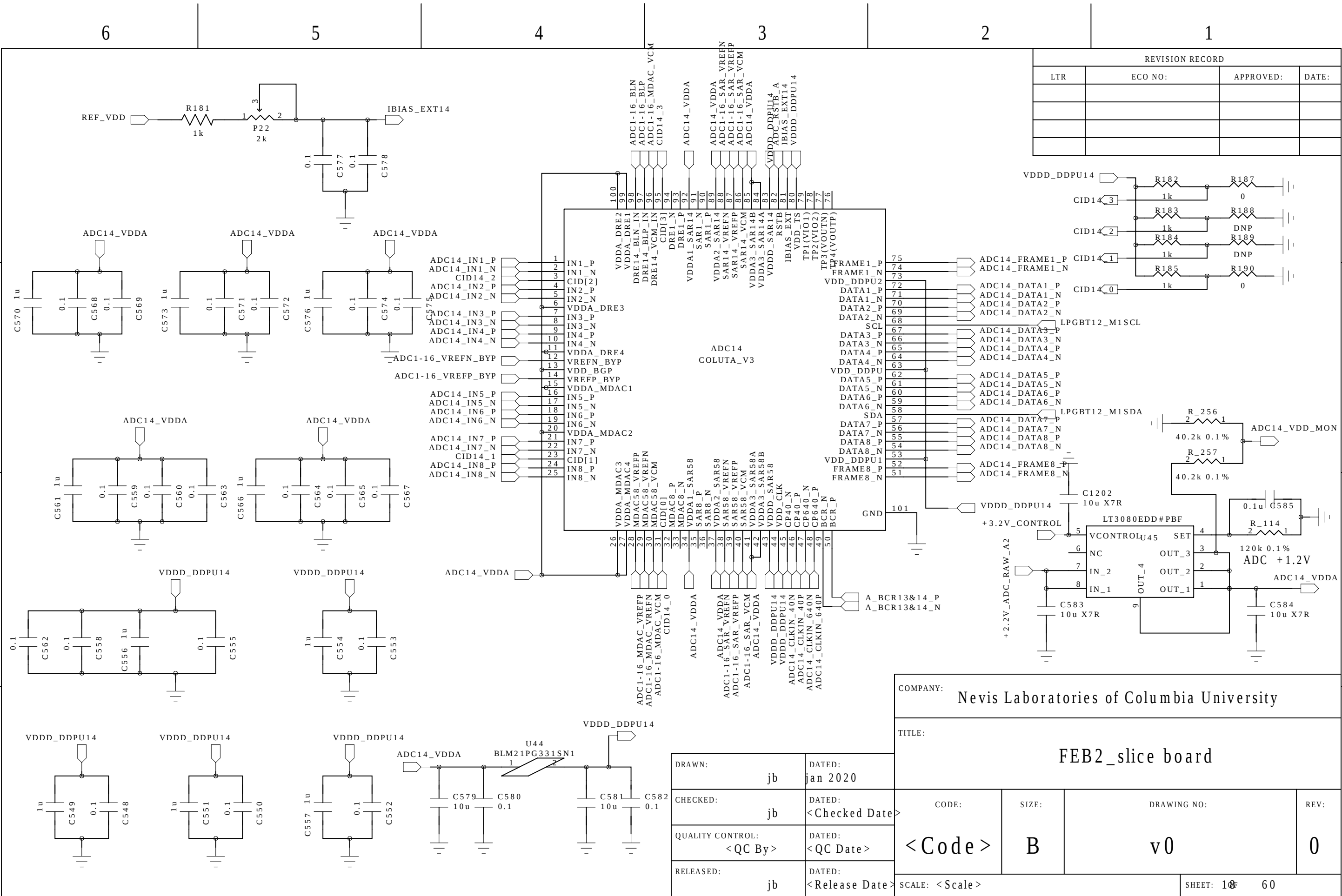


D

C

B

A



D

C

B

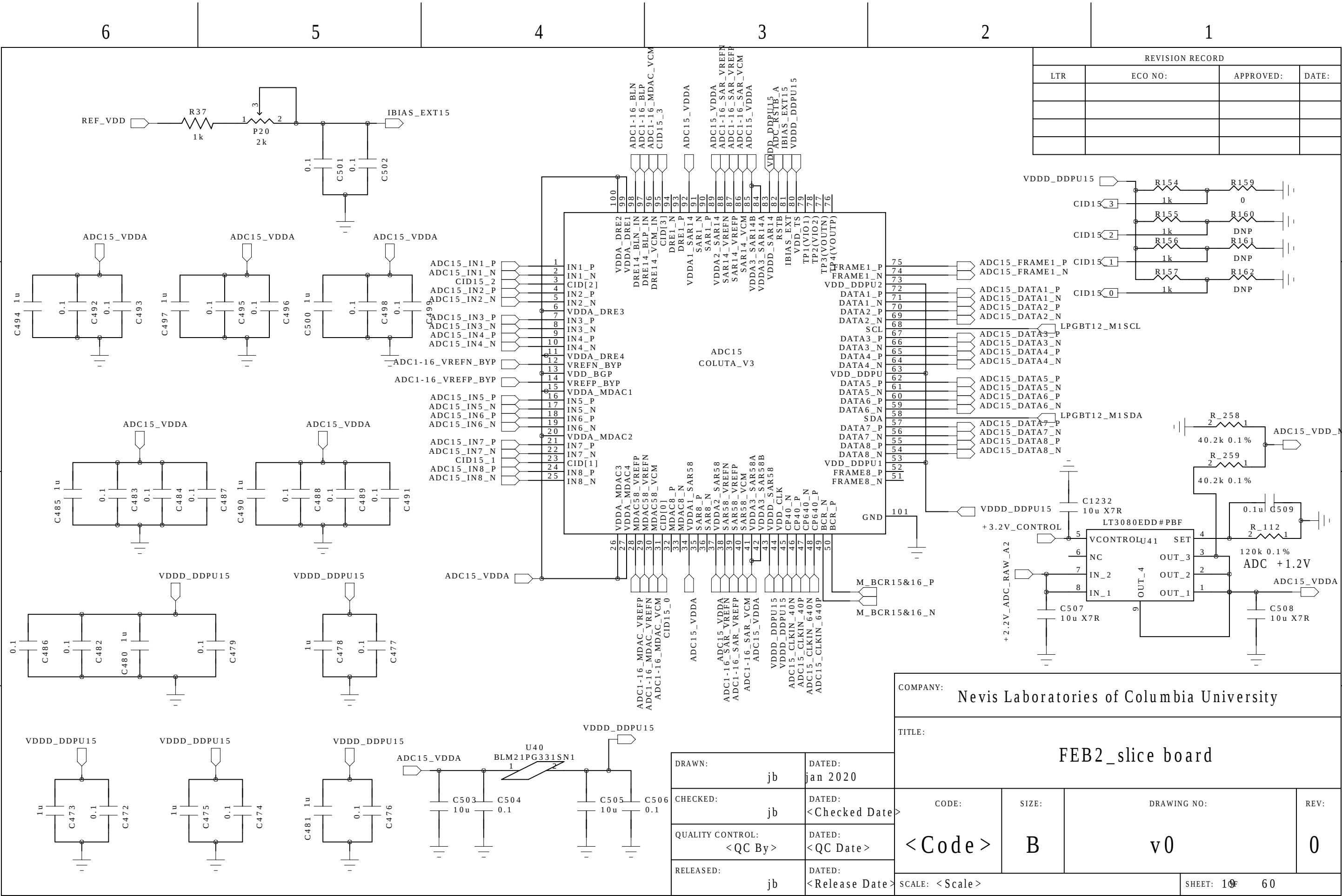
A

D

C

B

A

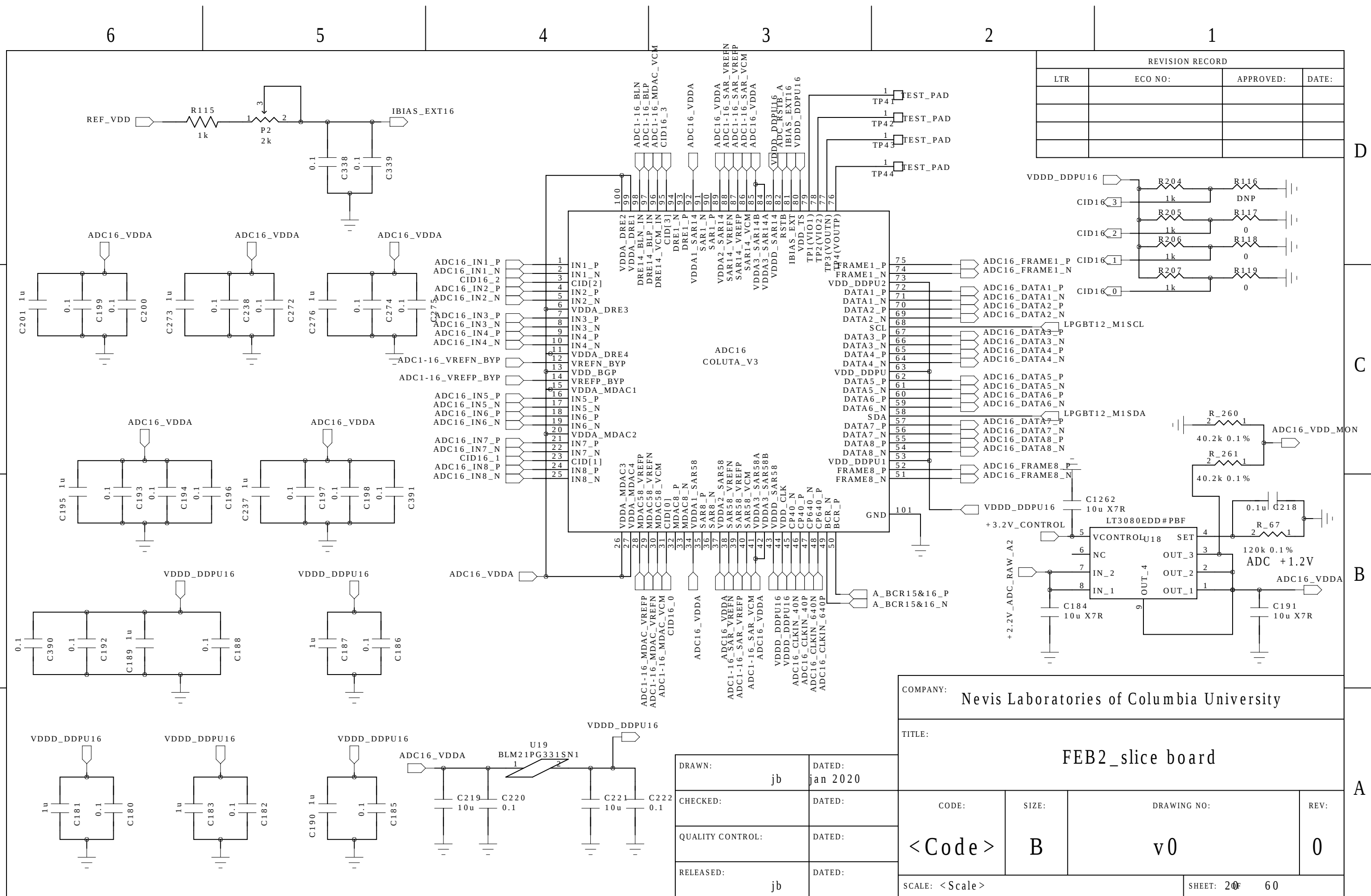


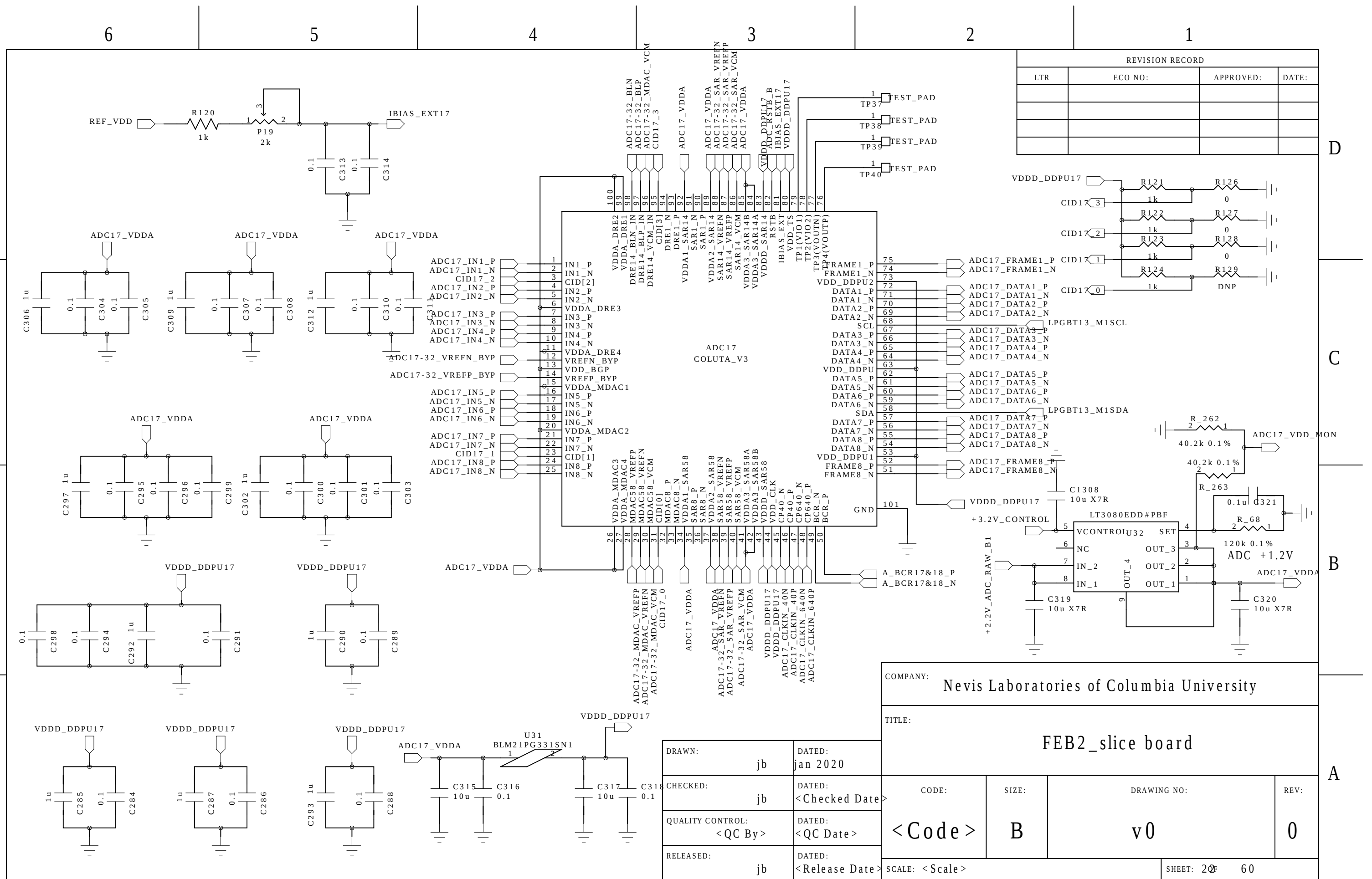
D

C

B

A





D

C

B

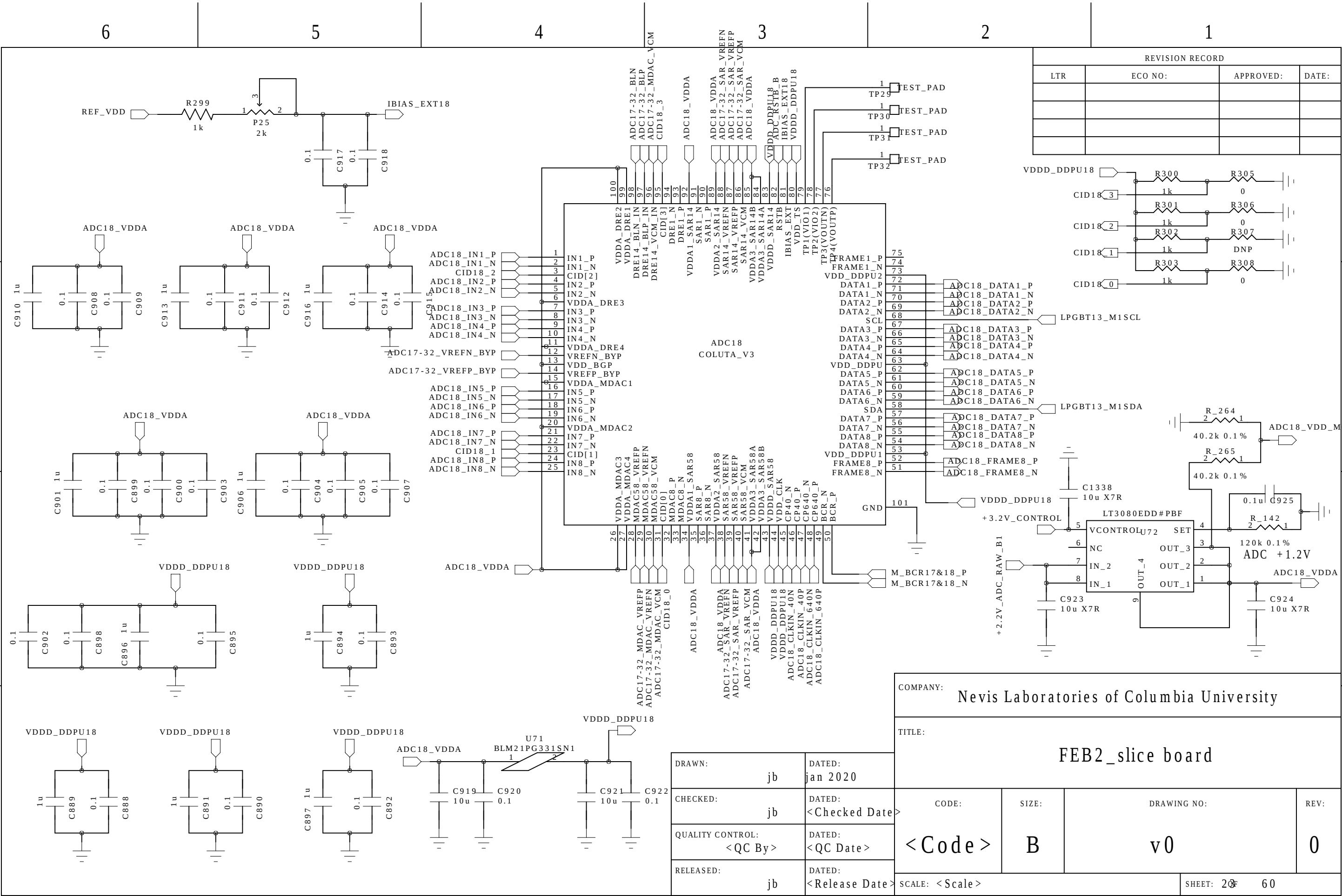
A

D

C

B

A

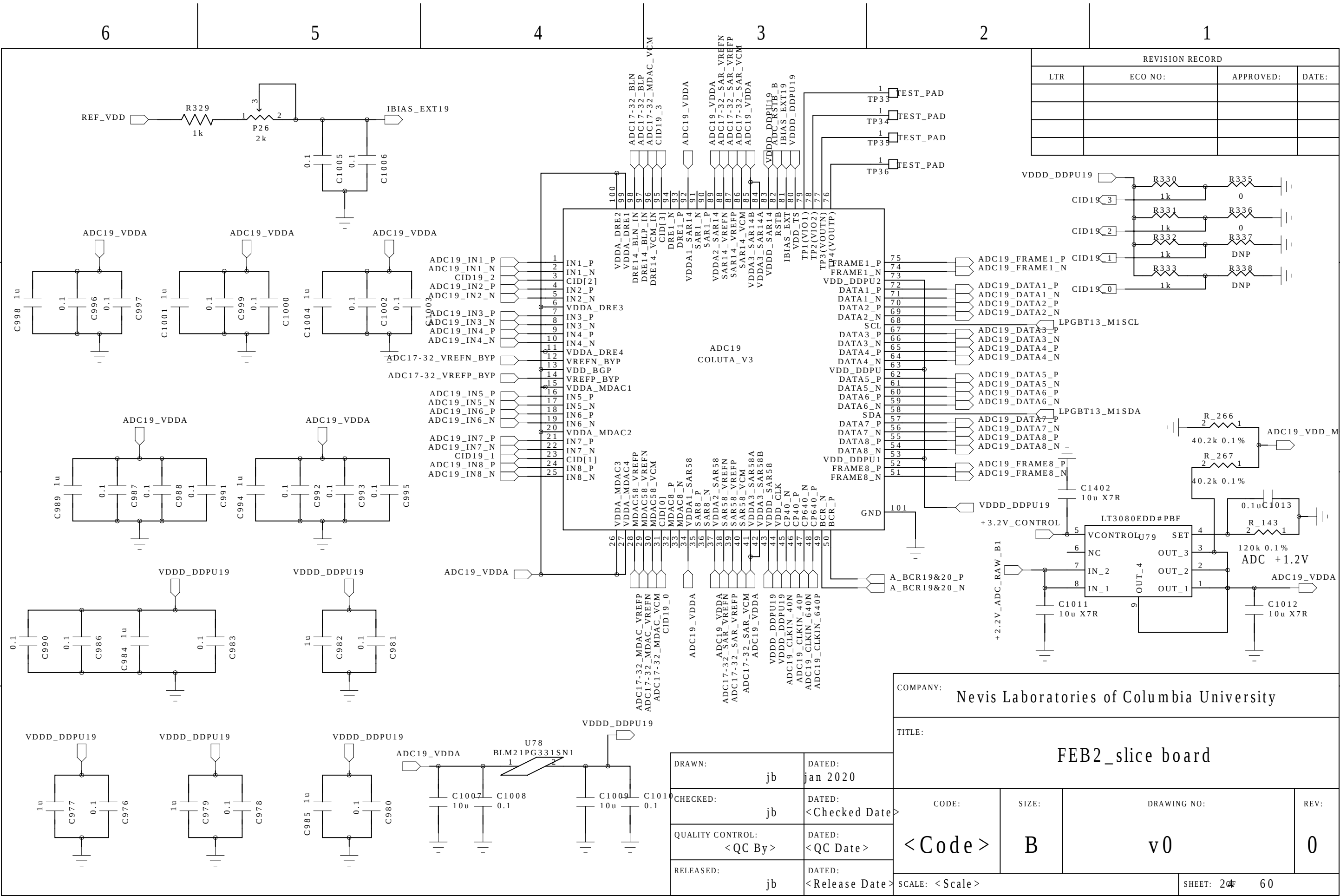


D

C

B

A



D

C

B

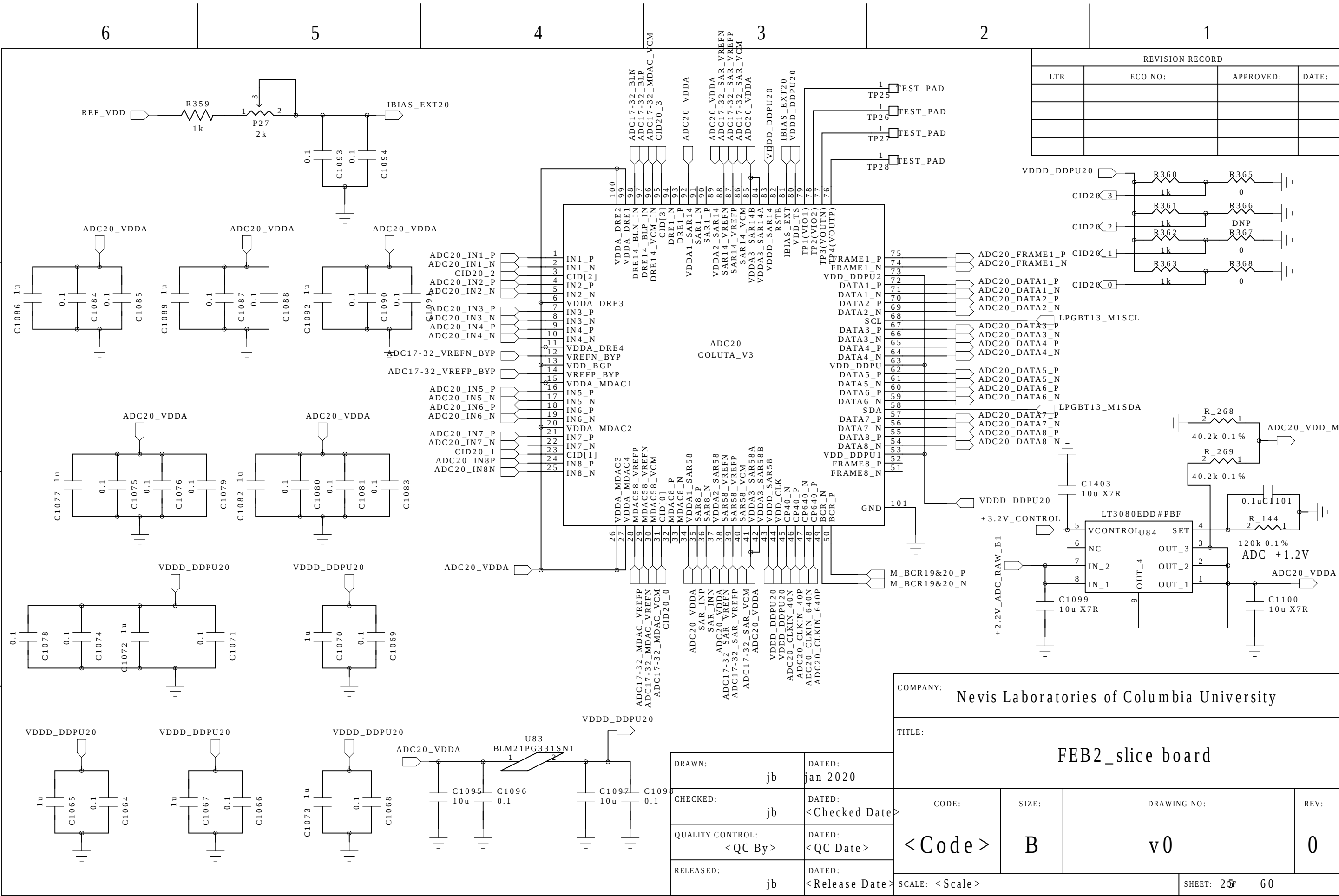
A

D

C

B

A

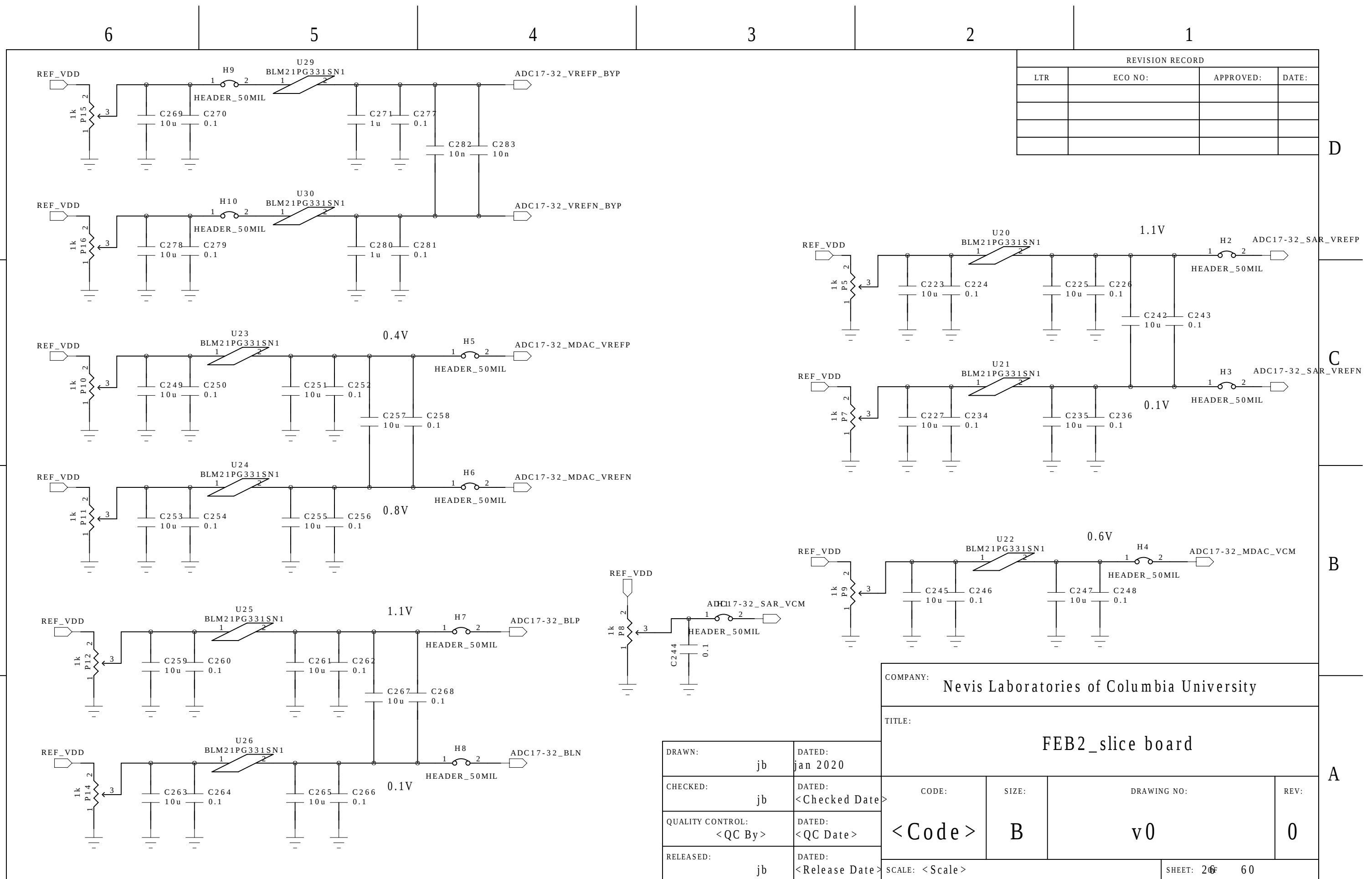


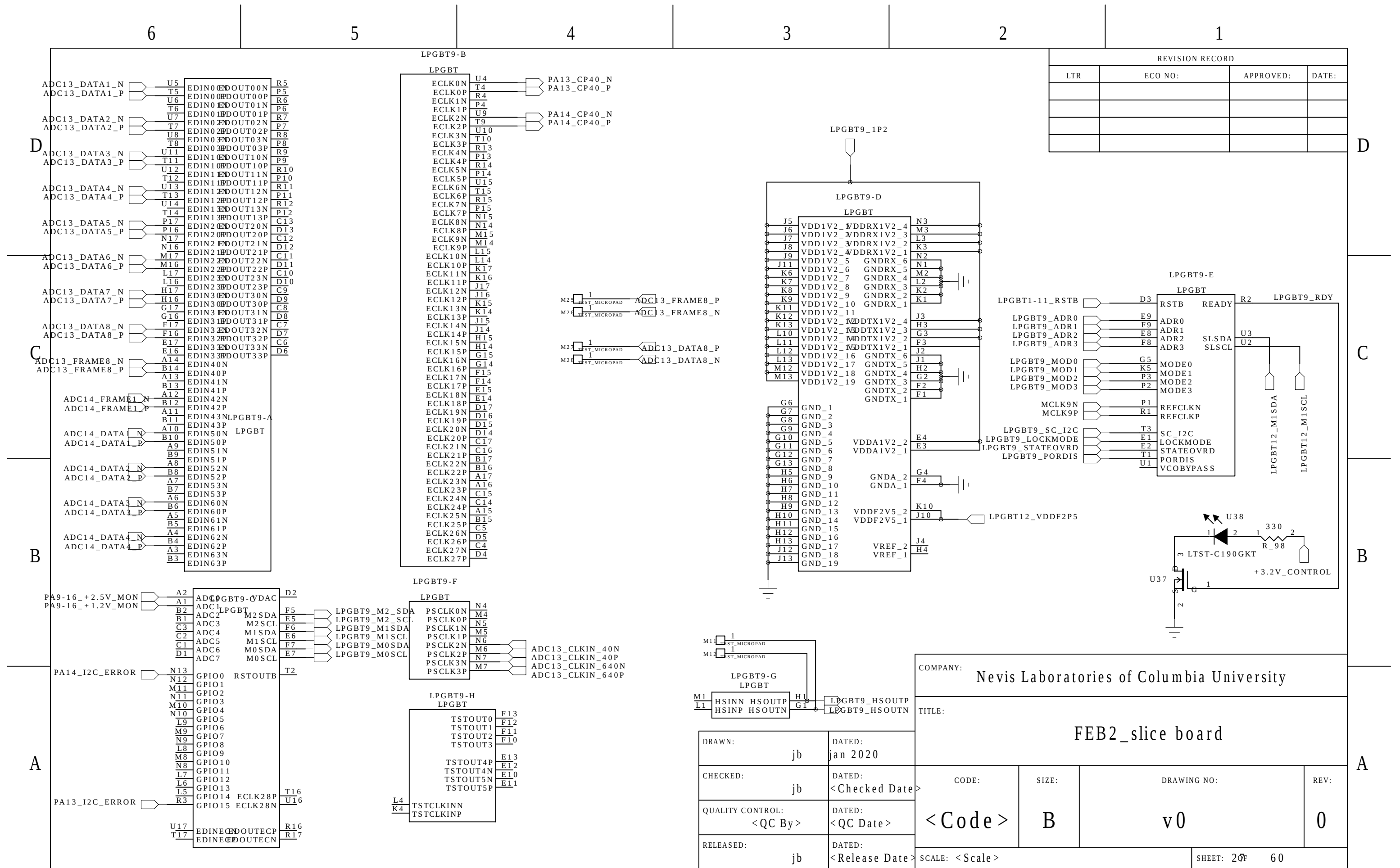
D

C

B

A





D

C

B

A

6

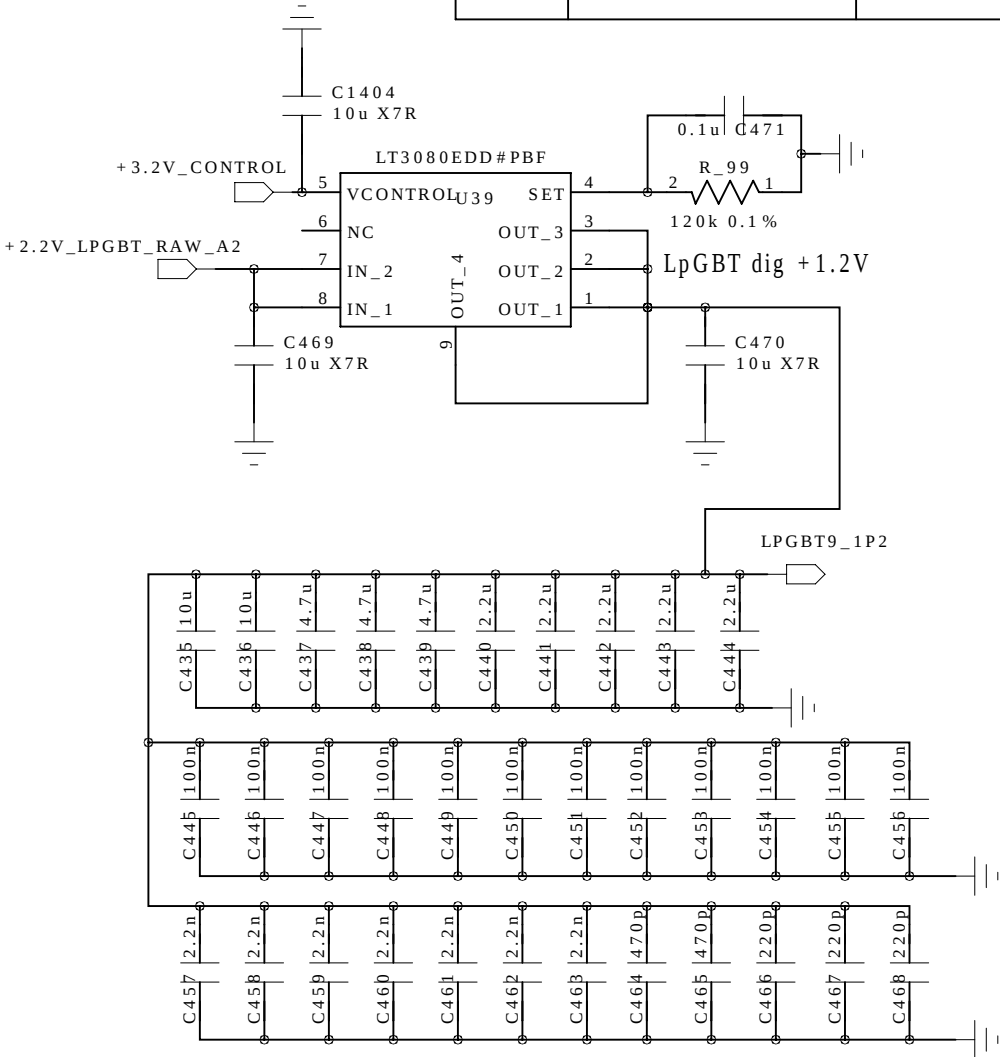
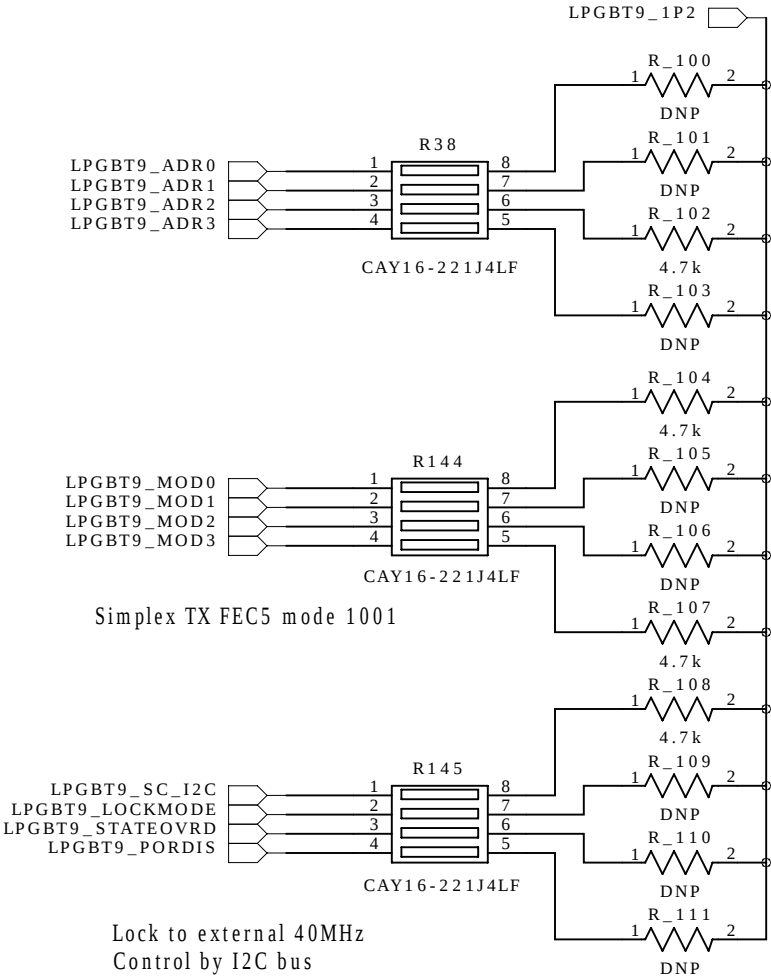
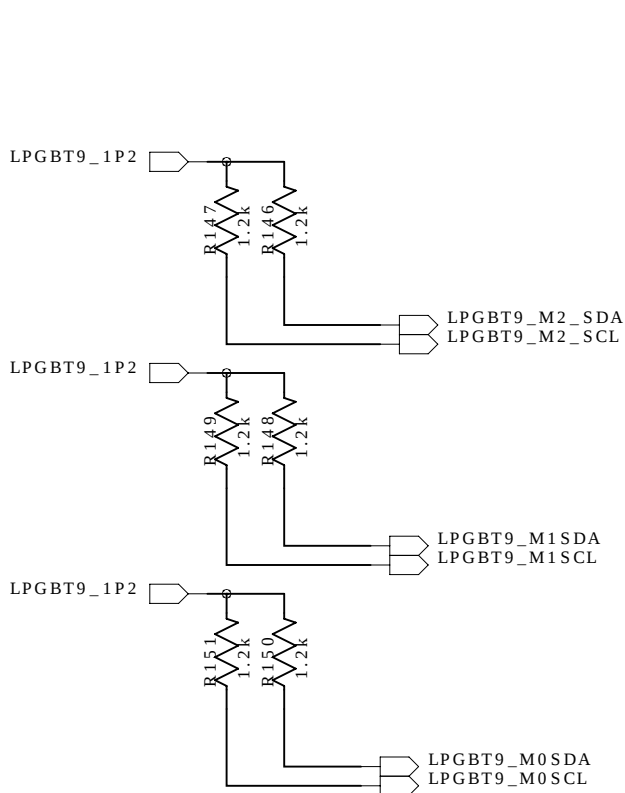
5

4

3

2

1



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 206 60

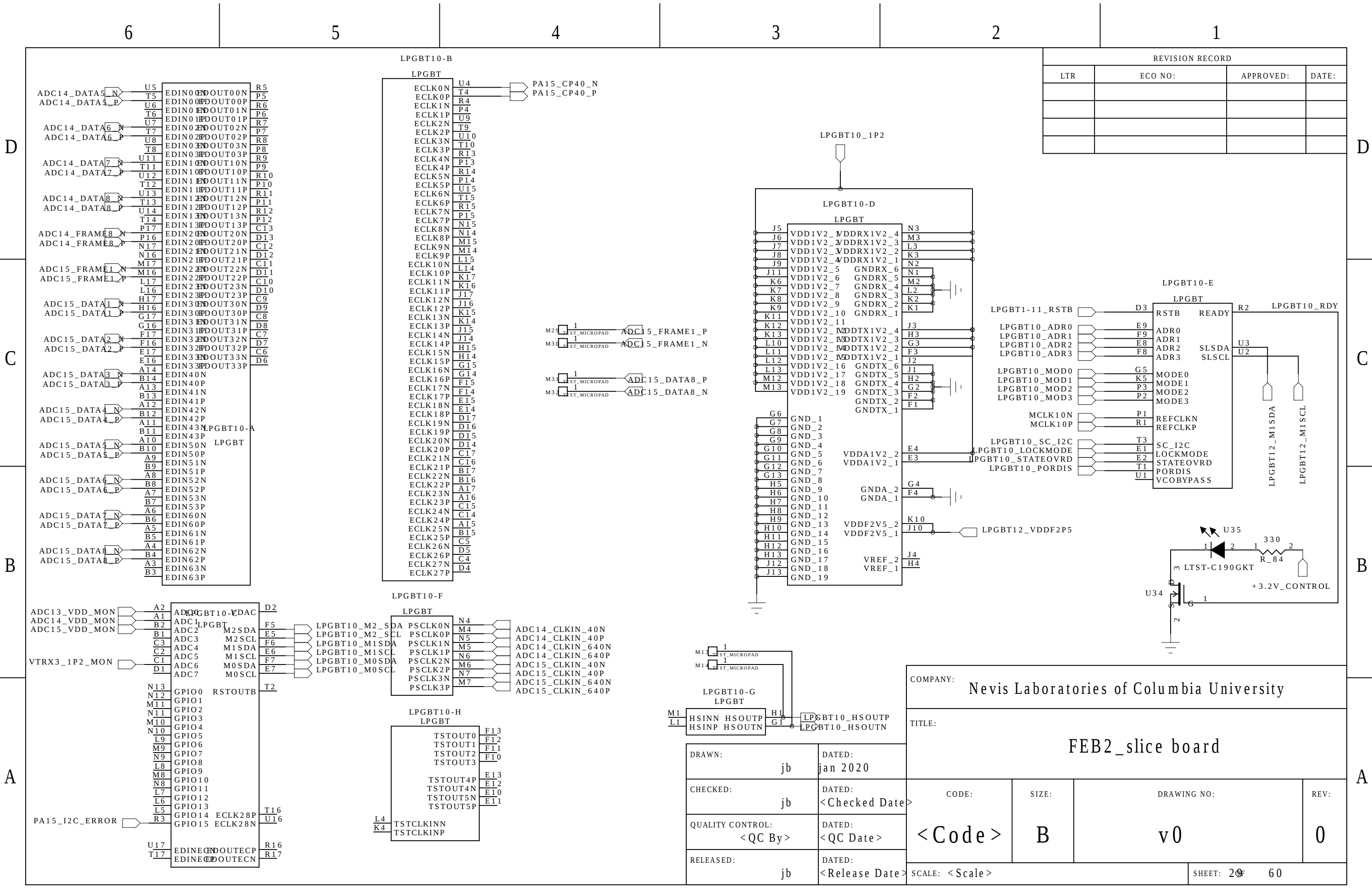
DRAWN:	DATED:
jb	jan 2020
CHECKED:	DATED:
jb	<Checked Date>
QUALITY CONTROL:	DATED:
<QC By>	<QC Date>
RELEASED:	DATED:
jb	<Release Date>

D

C

B

A



6

5

4

3

2

1

D

C

B

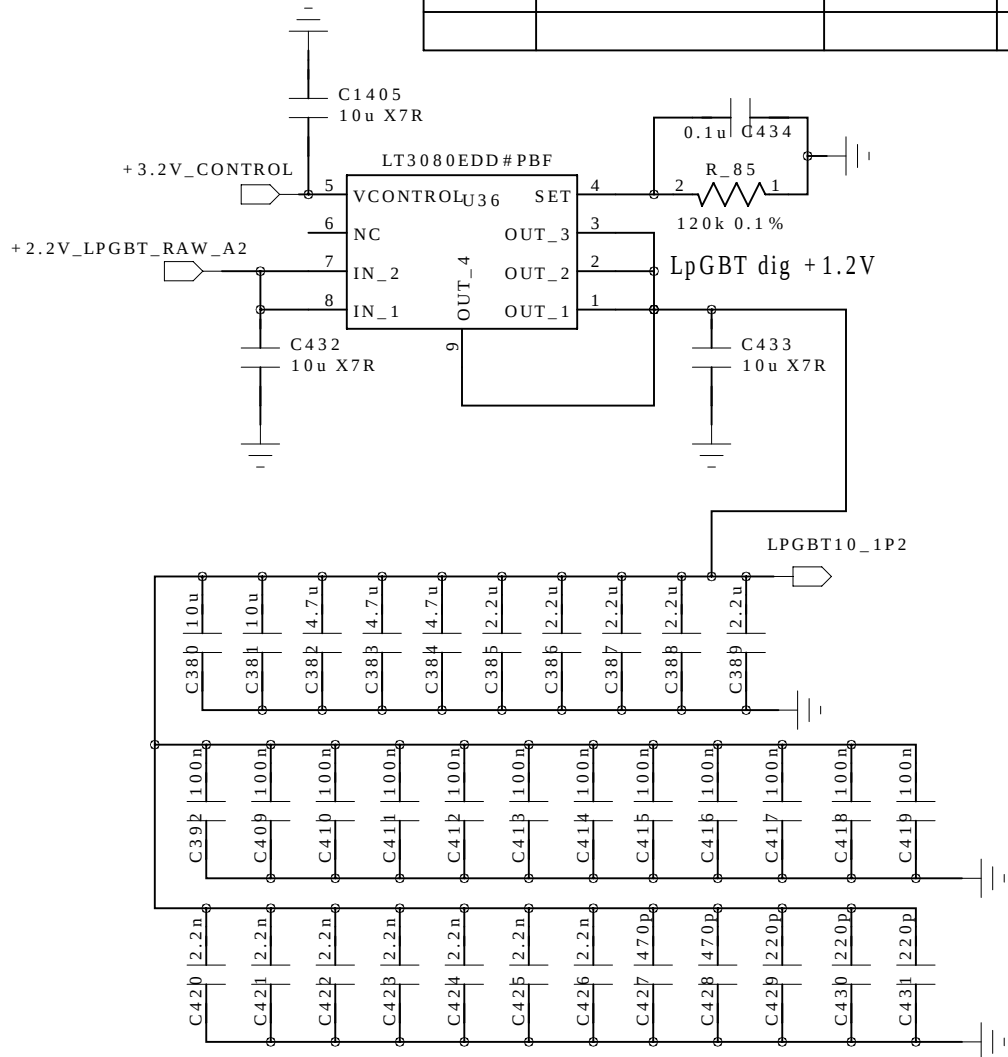
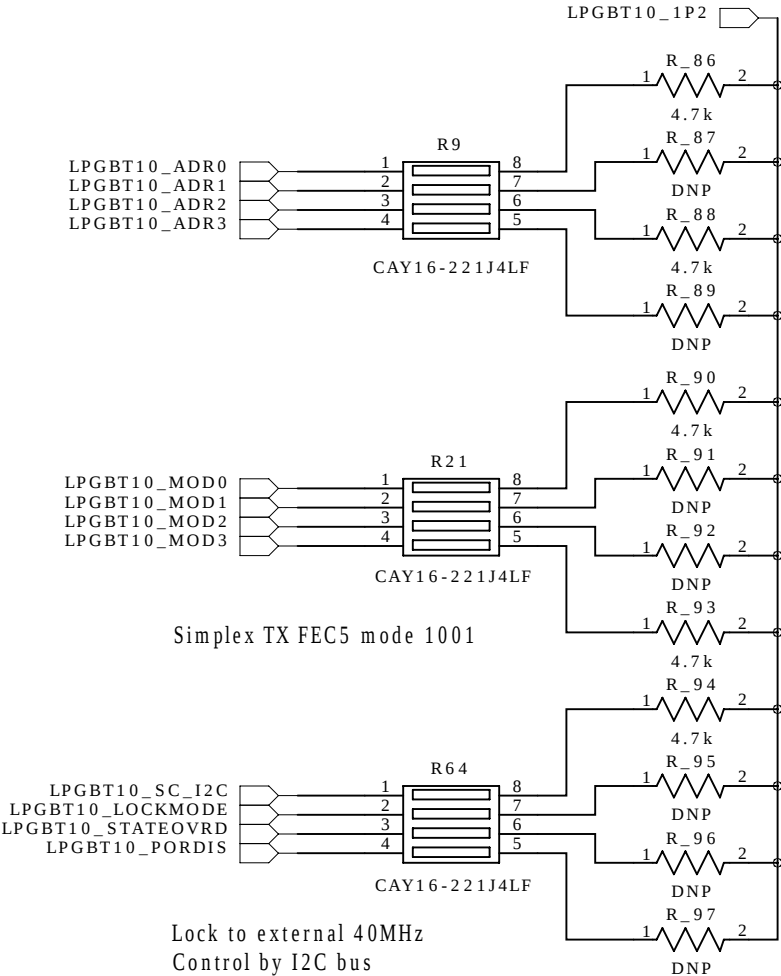
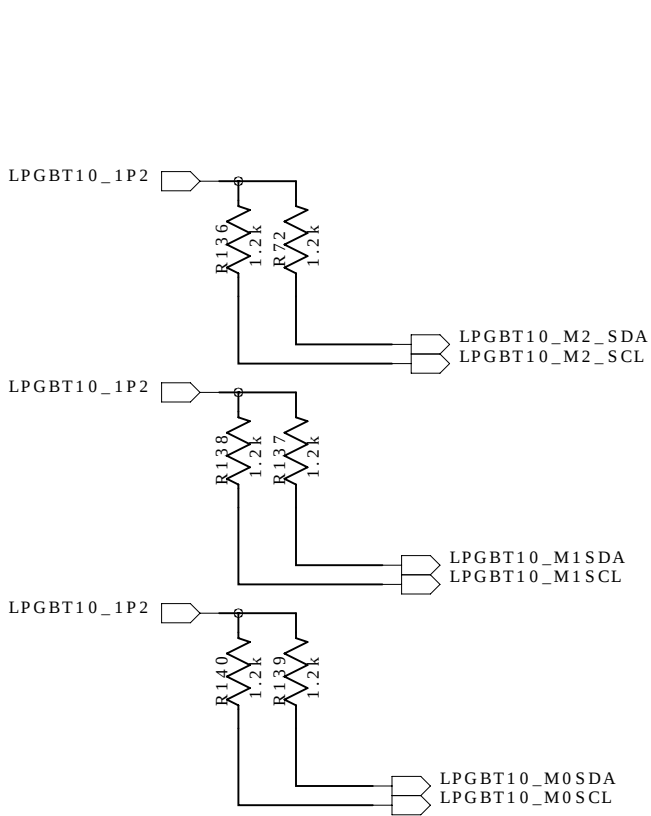
A

D

C

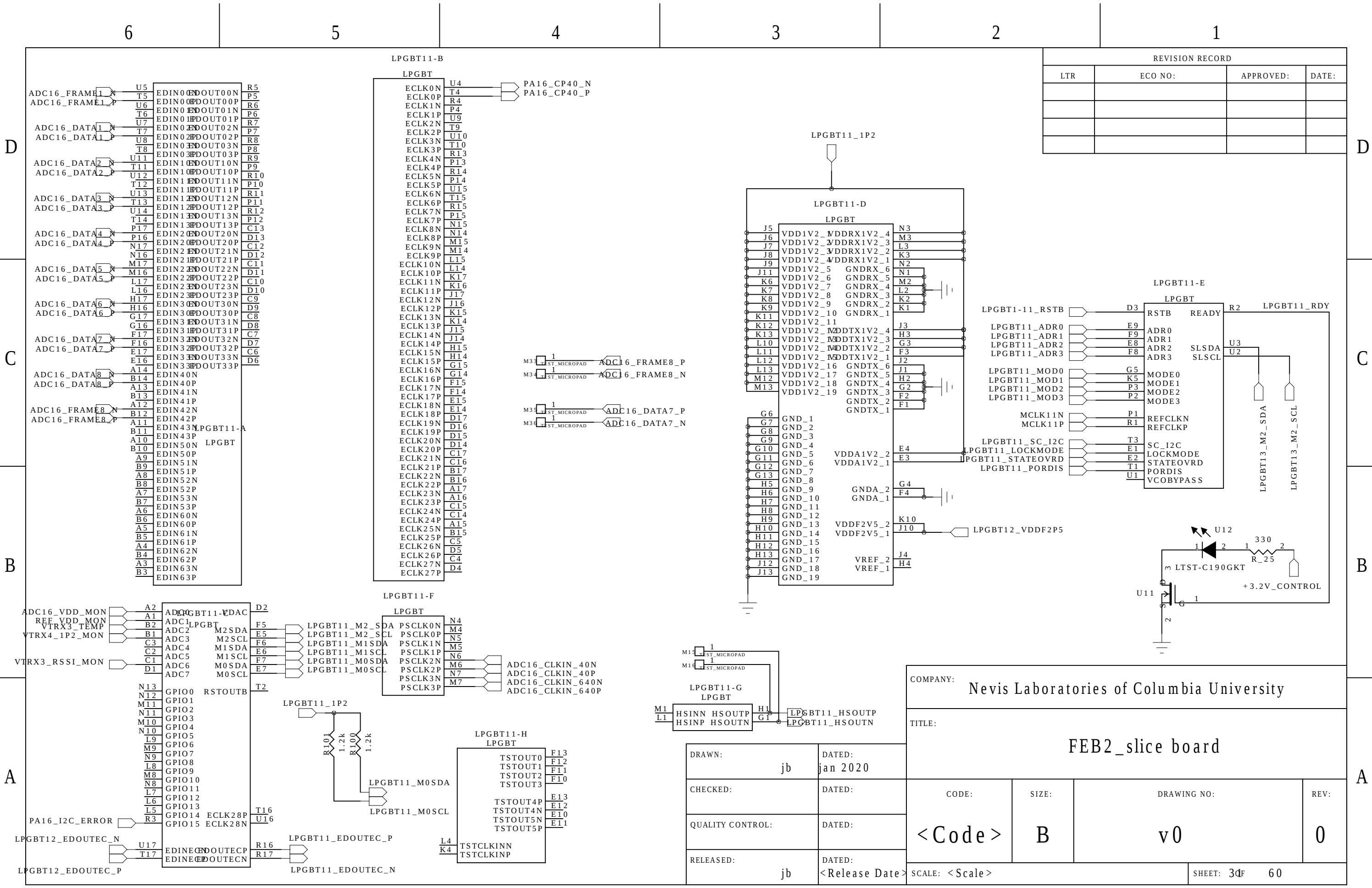
B

A



COMPANY: Nevis Laboratories of Columbia University				
TITLE: FEB2_slice board				
CODE:	SIZE:	DRAWING NO:	REV:	
<Code>	B	v0	0	
SCALE: <Scale>			SHEET: 30F 60	

DRAWN:	jb	DATED:	jan 2020
CHECKED:	jb	DATED:	<Checked Date>
QUALITY CONTROL:	<QC By>	DATED:	<QC Date>
RELEASED:	jb	DATED:	<Release Date>



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
DRAWN: jb	DATED: Jan 2020		
CHECKED:	DATED:	CODE: <Code>	SIZE: B
QUALITY CONTROL:	DATED:	DRAWING NO: v0	
RELEASED: jb	DATED: <Release Date>	REV: 0	
SCALE: < Scale >			SHEET: 3 of 60

D

C

B

A

6

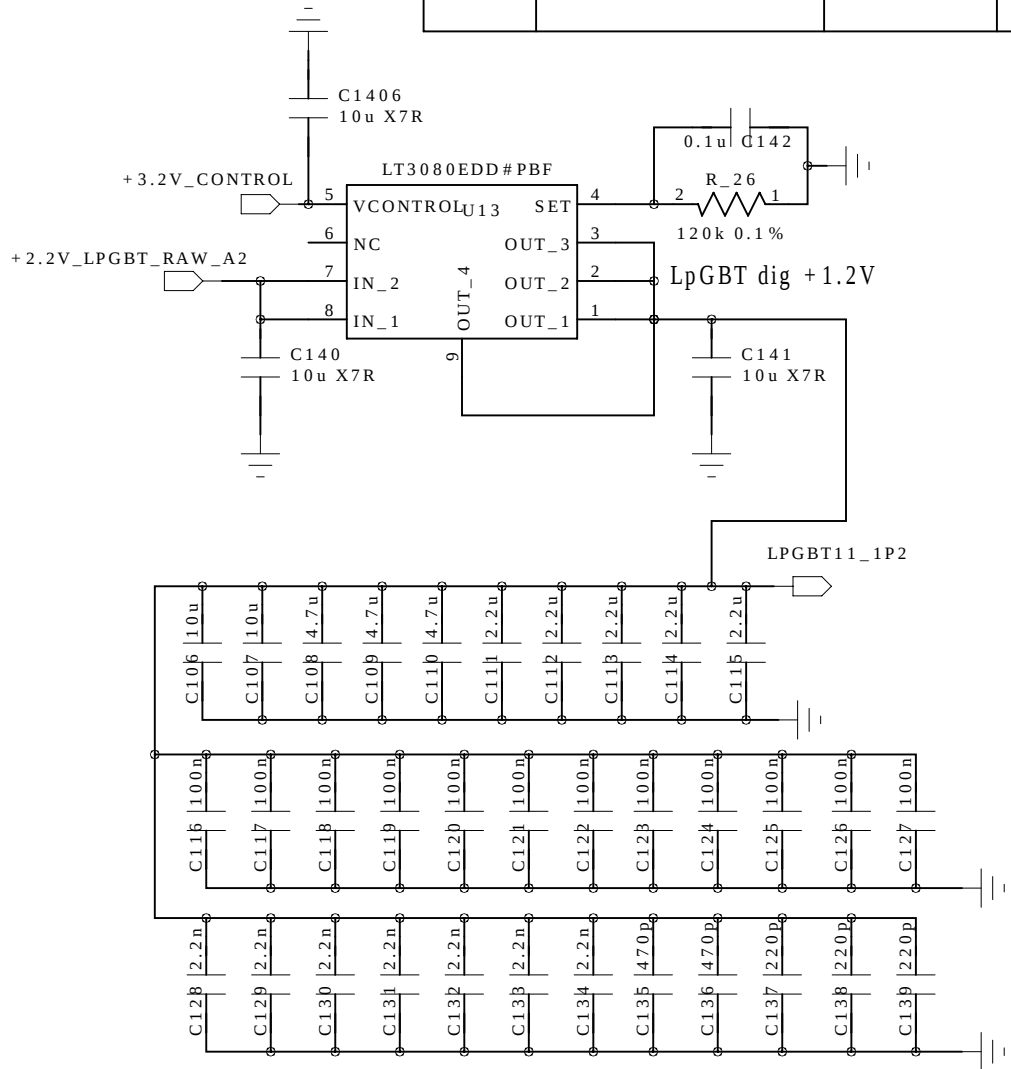
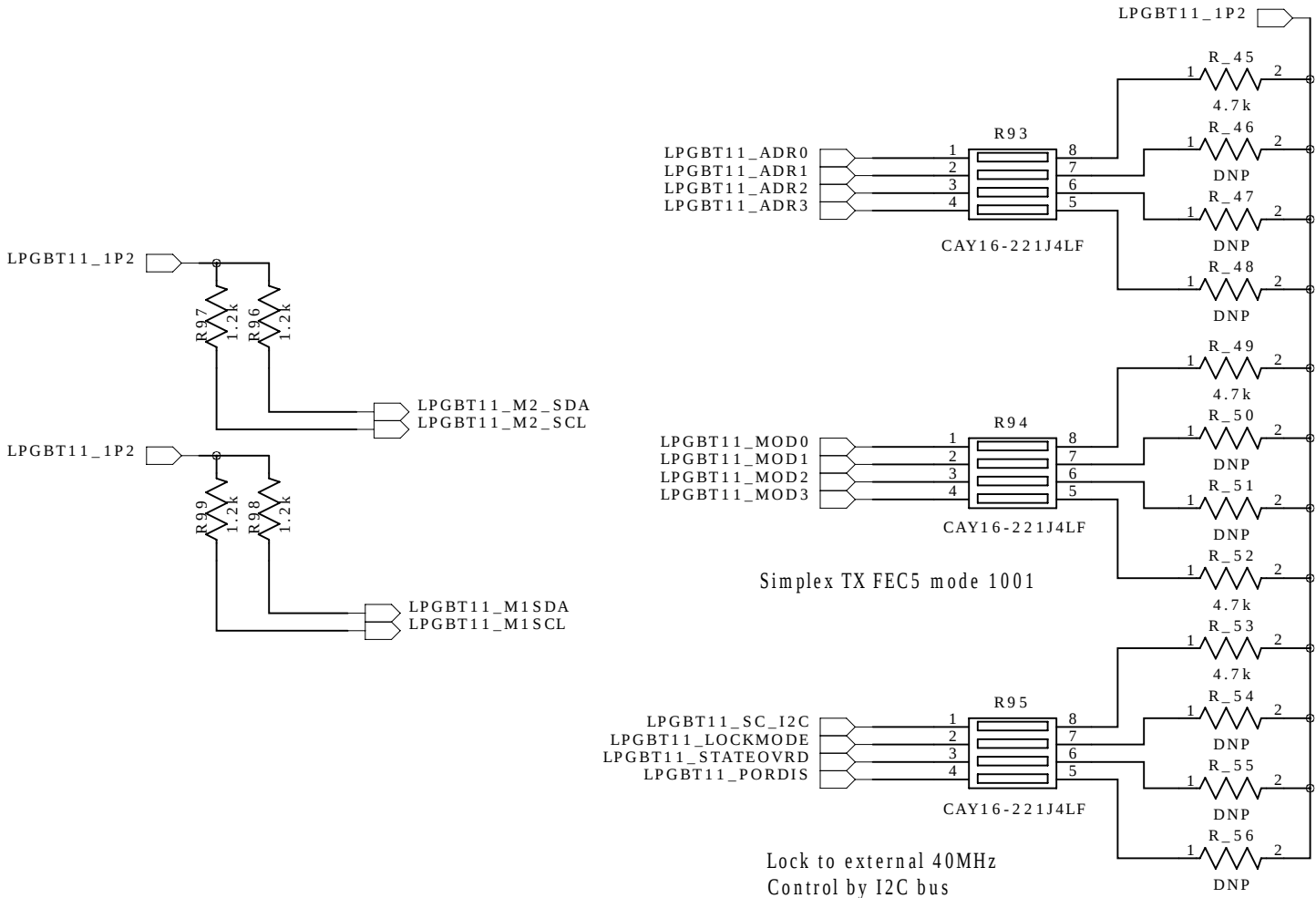
5

4

3

2

1



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 30 60	

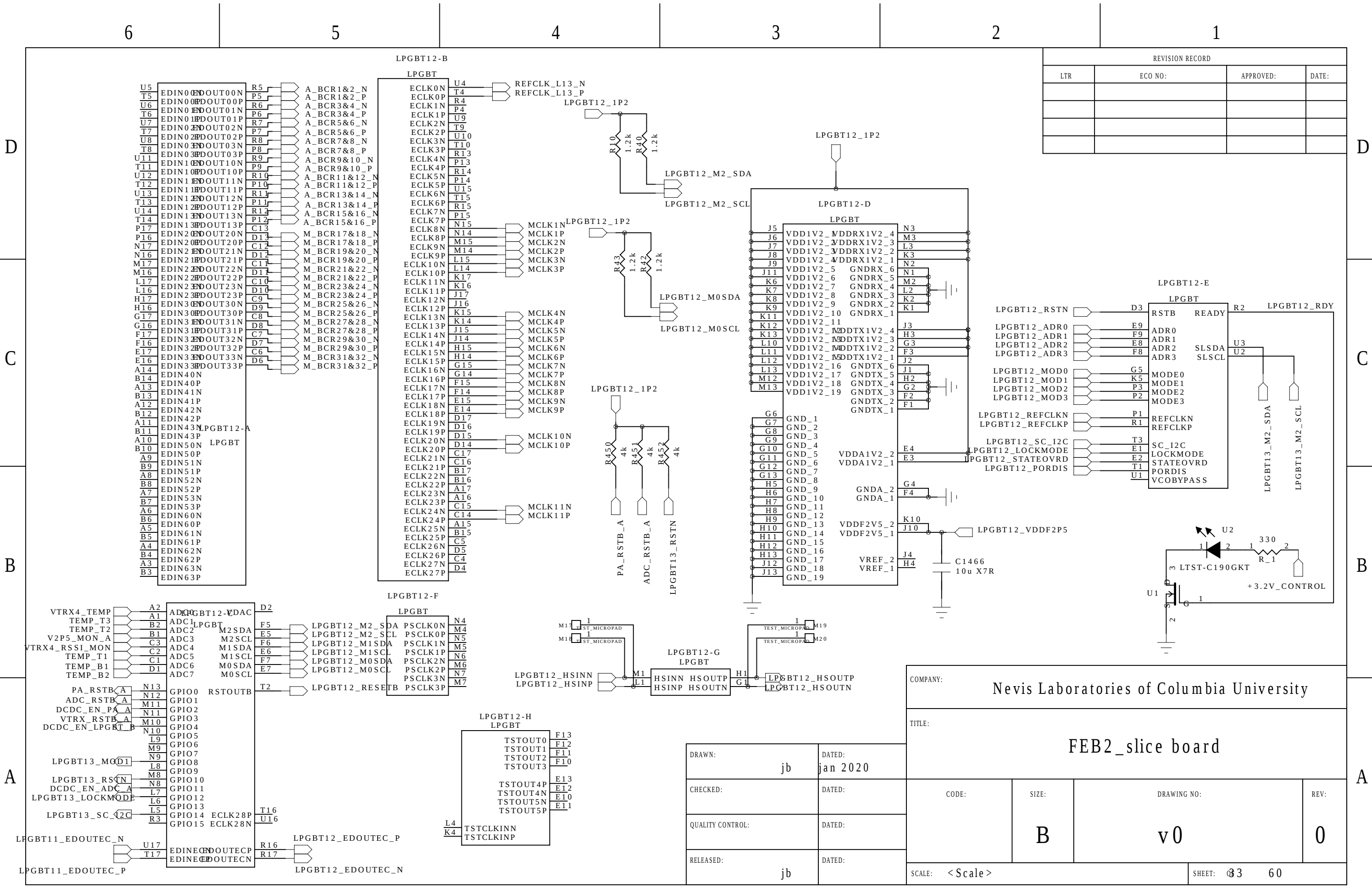
DRAWN: jb	DATED: Jan 2020
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED: jb	DATED: <Release Date>

D

C

B

A

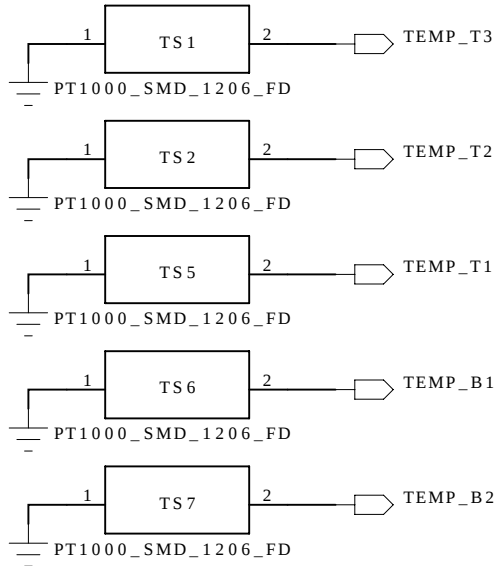
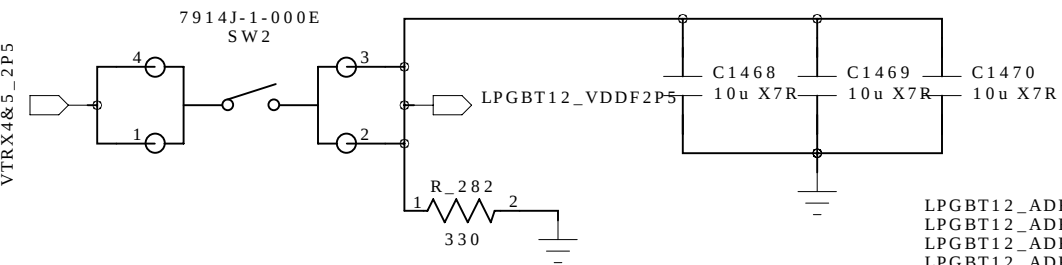


D

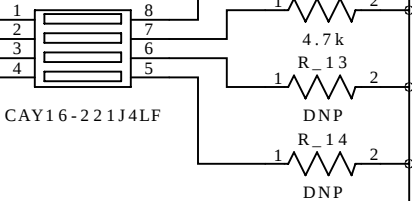
C

B

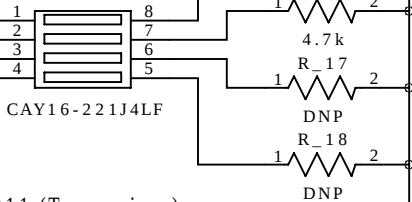
A



LPGBT12_ADR0
LPGBT12_ADR1
LPGBT12_ADR2
LPGBT12_ADR3

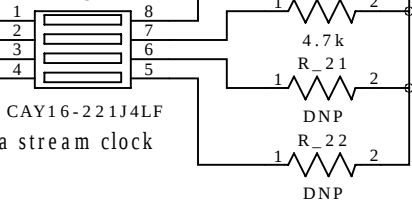


LPGBT12_MOD0
LPGBT12_MOD1
LPGBT12_MOD2
LPGBT12_MOD3

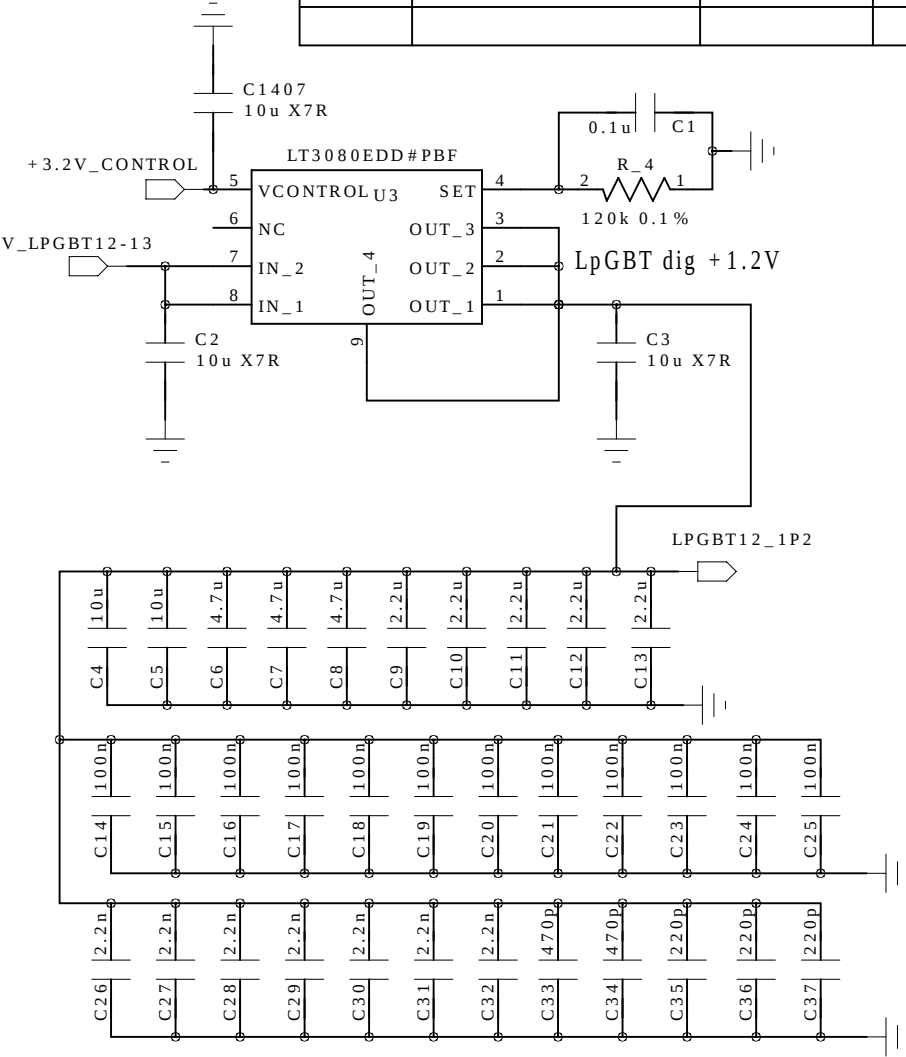
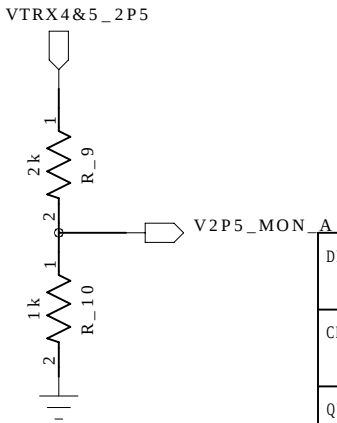
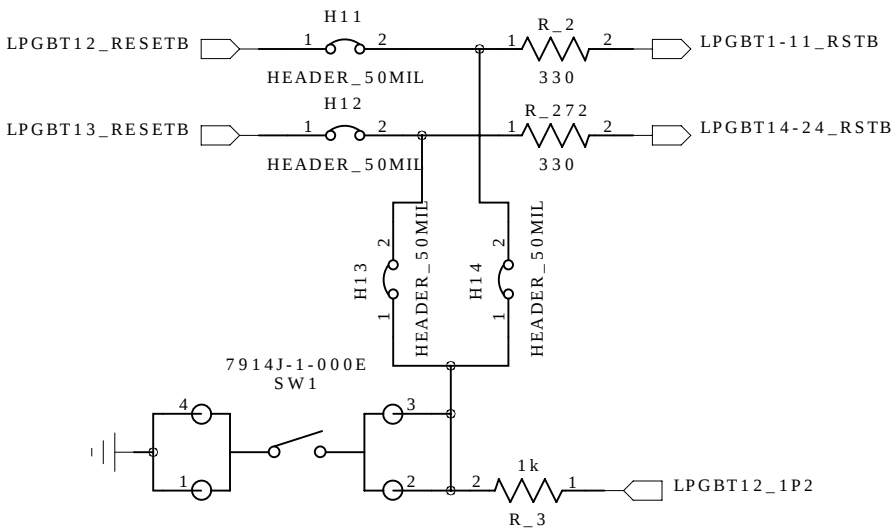


TX data rate is 5.12 GHz
Mode 0001 (using refClk) or 0011 (Transceiver)

LPGBT12_SC_I2C
LPGBT12_LOCKMODE
LPGBT12_STATEOVRD
LPGBT12_PORDIS



Lock to downlink data stream clock



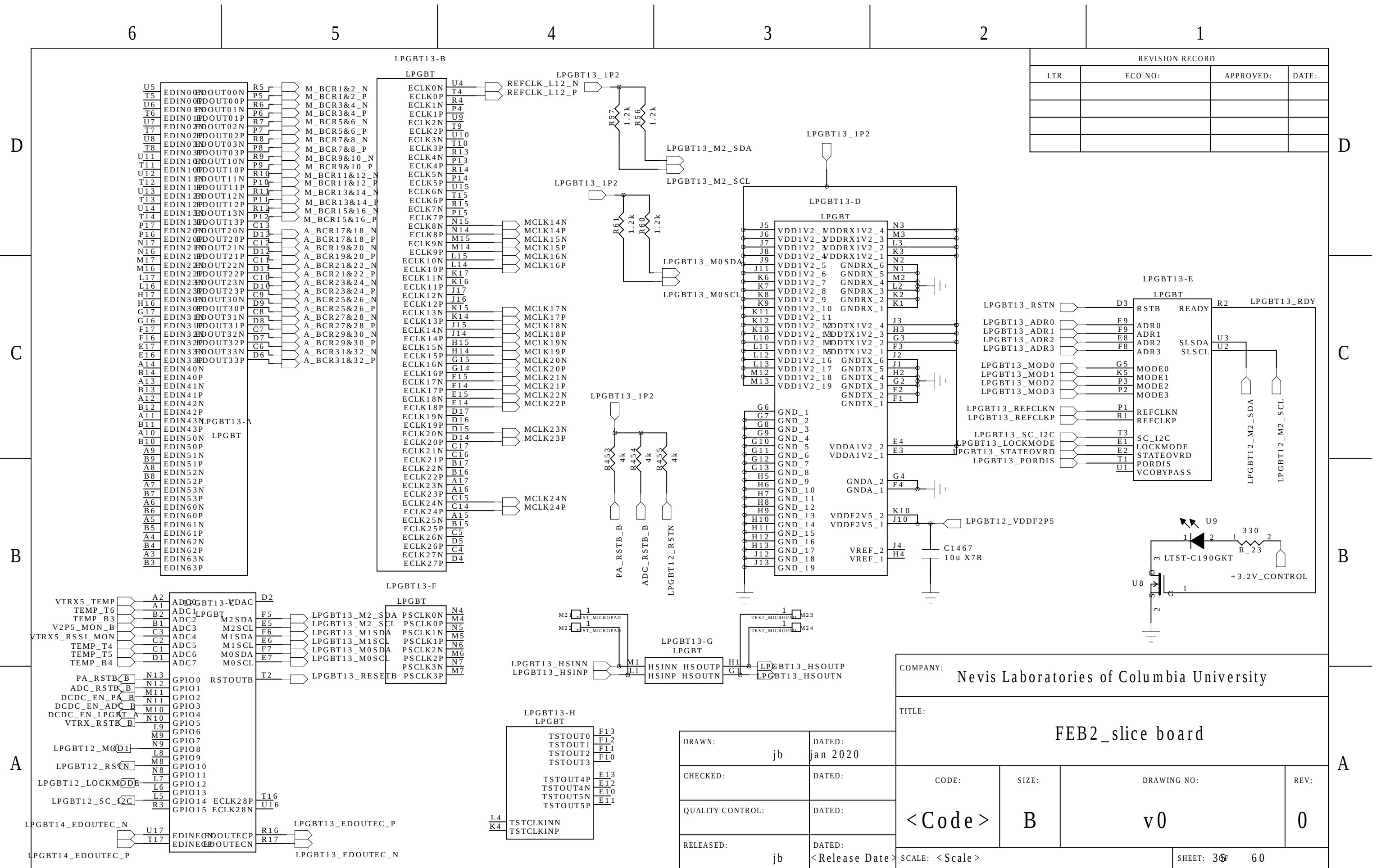
COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE: B	DRAWING NO: v0	REV: 0
SCALE:			SHEET: 34 60

D

C

B

A



6

5

4

3

2

1

D

C

B

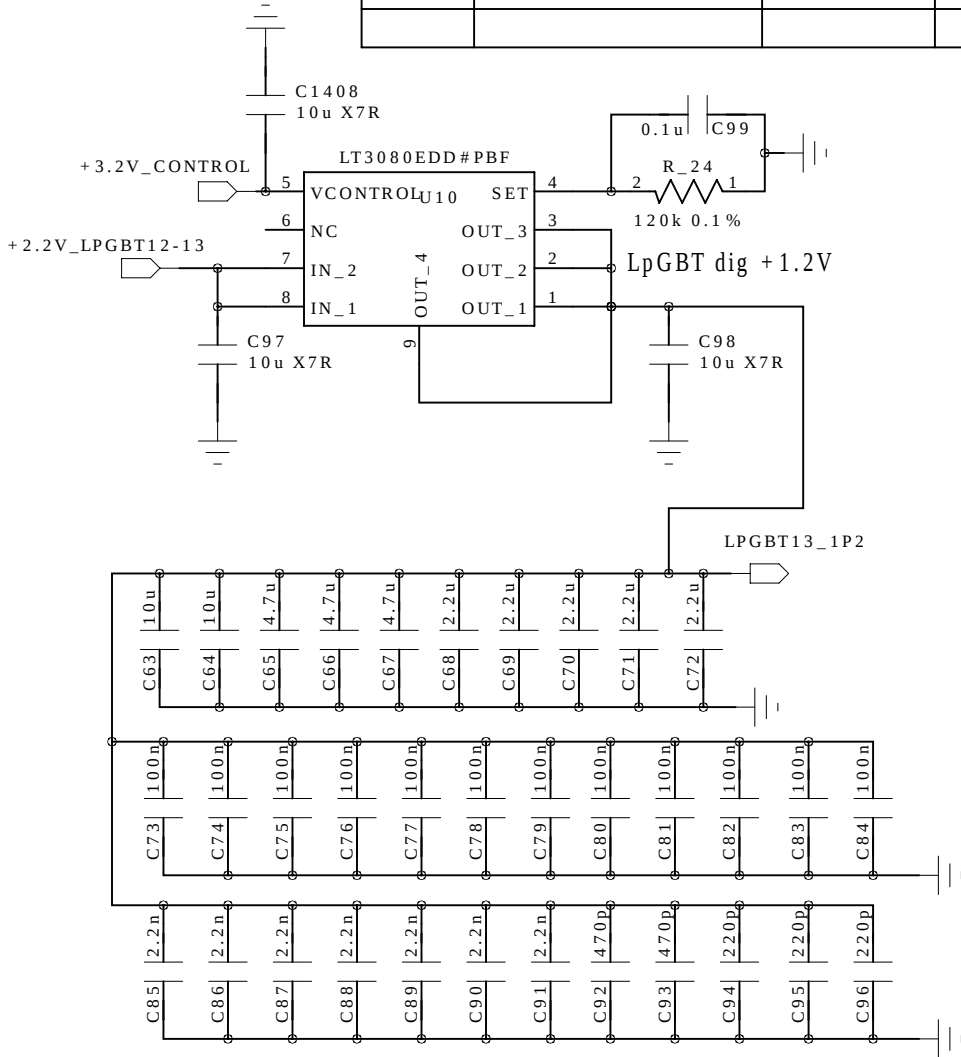
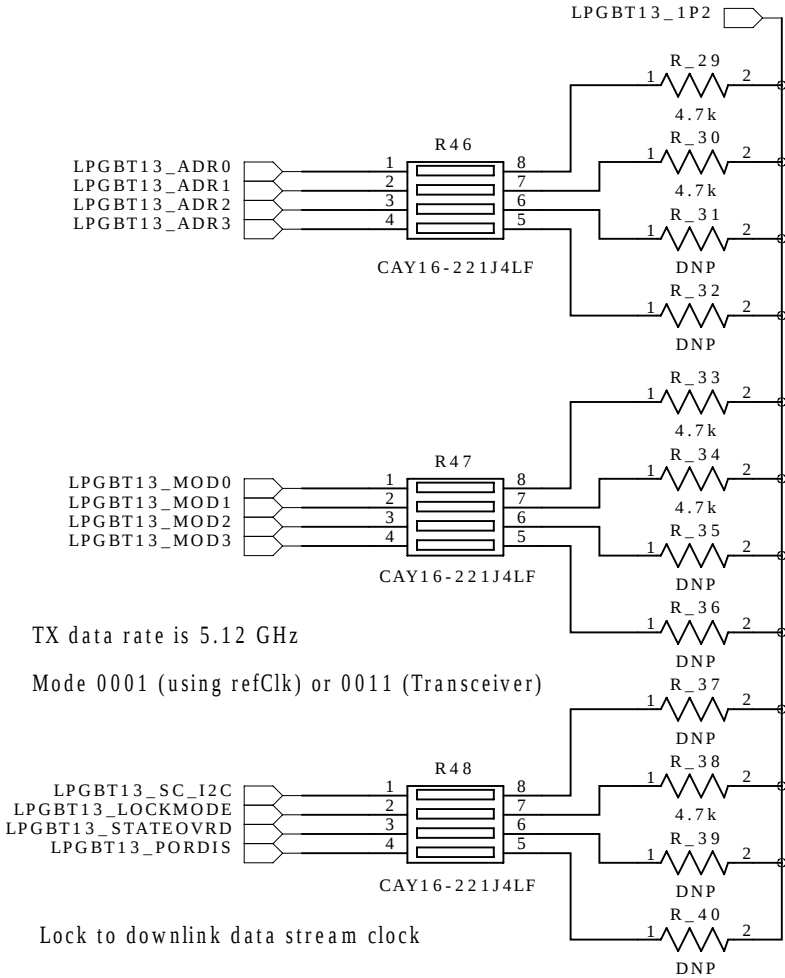
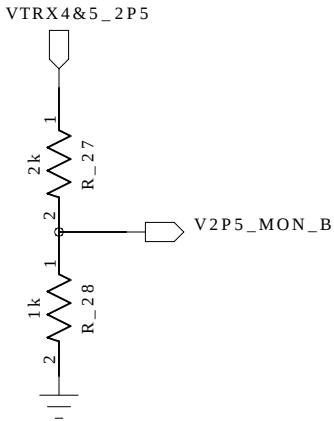
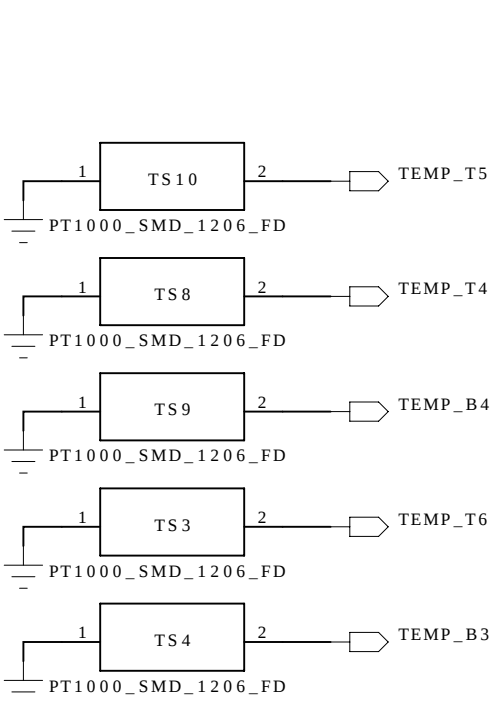
A

D

C

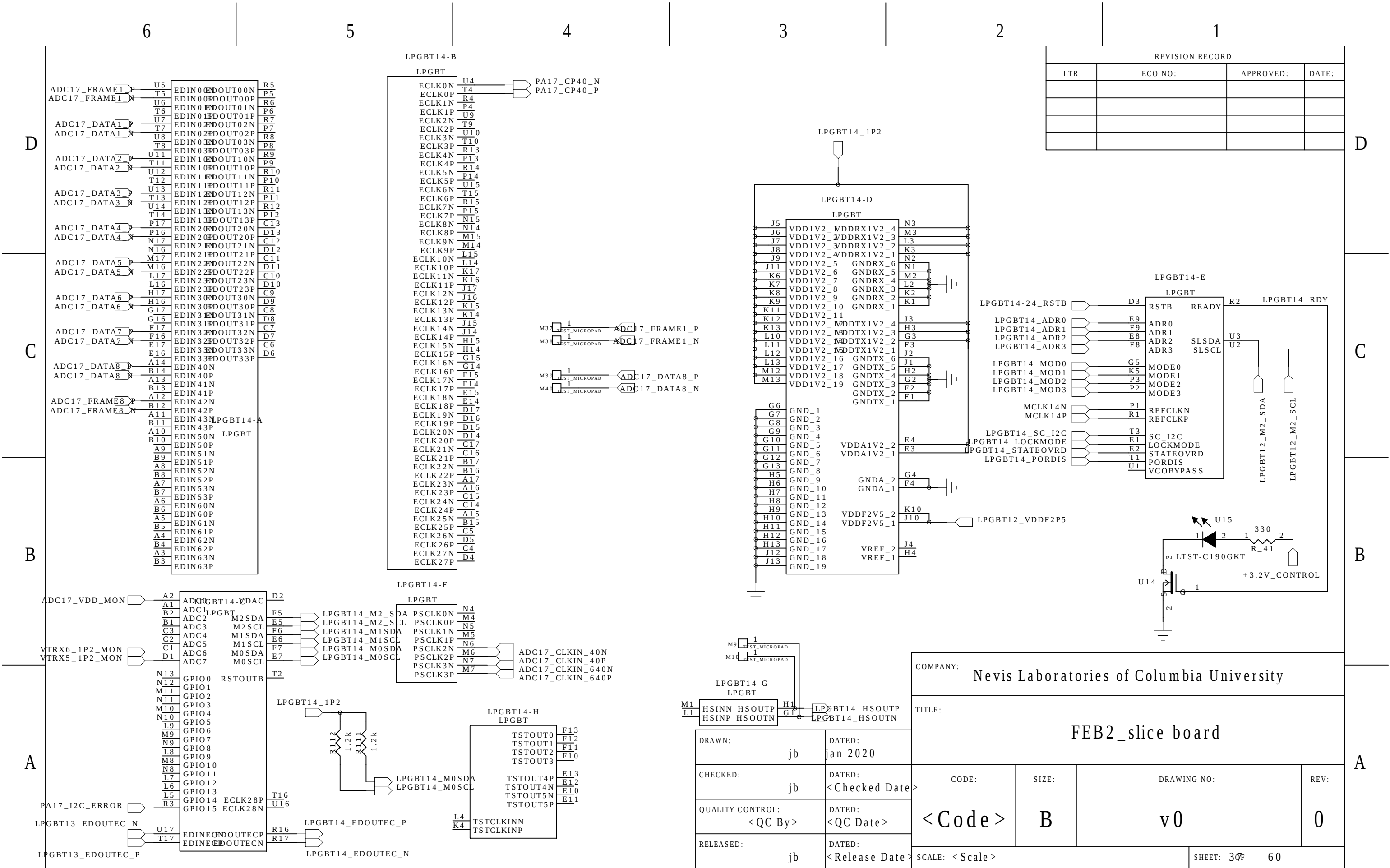
B

A



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 30 60	

DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>



D

C

B

A

6

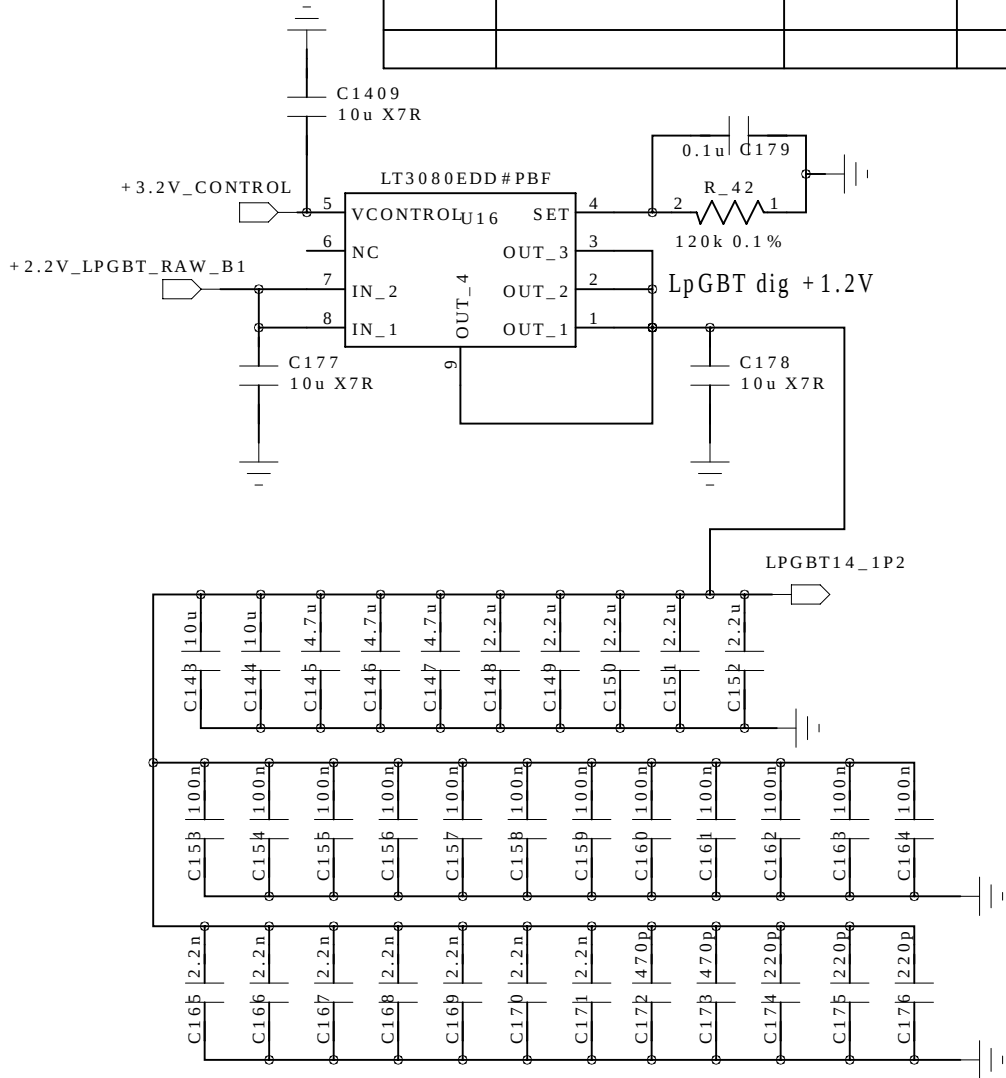
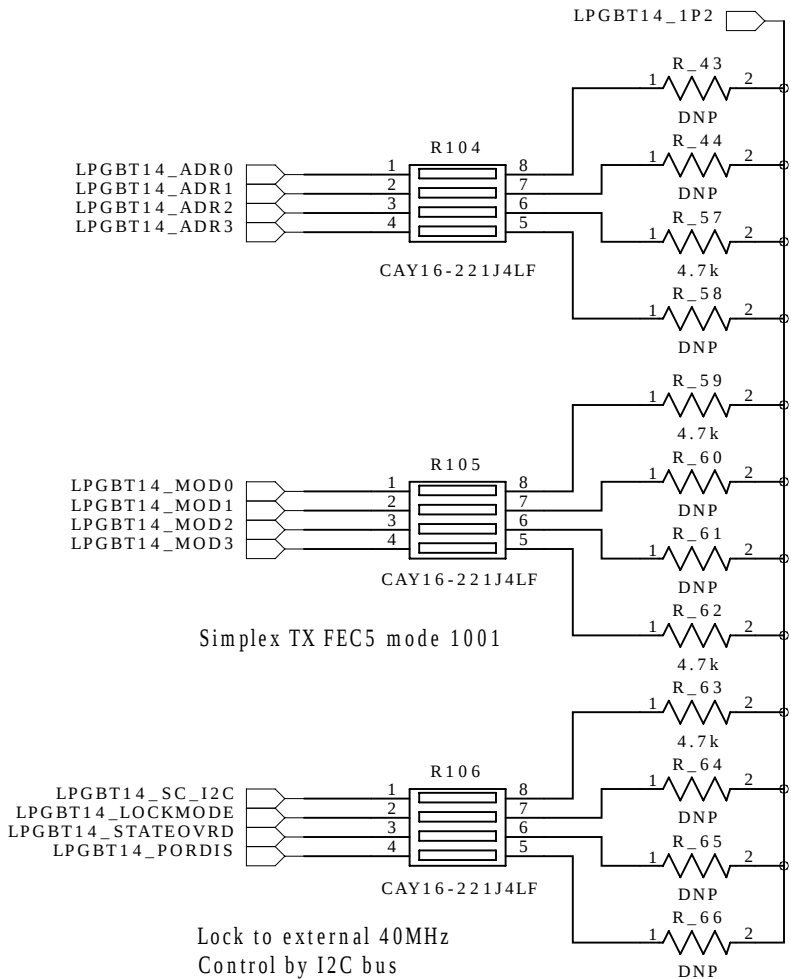
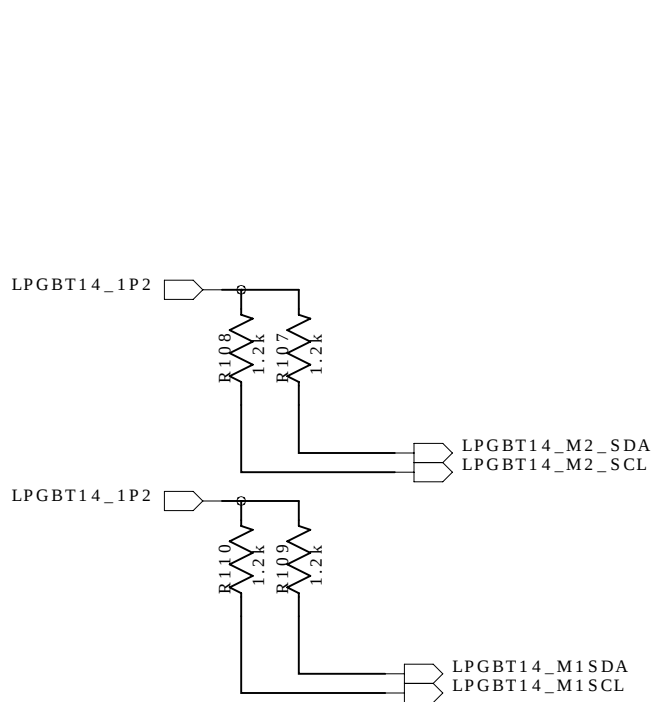
5

4

3

2

1



COMPANY:				
Nevis Laboratories of Columbia University				
TITLE:				
FEB2_slice board				
CODE:	SIZE:	DRAWING NO:		REV:
<Code>	B	v0		0
SCALE: <Scale>			SHEET: 30 60	

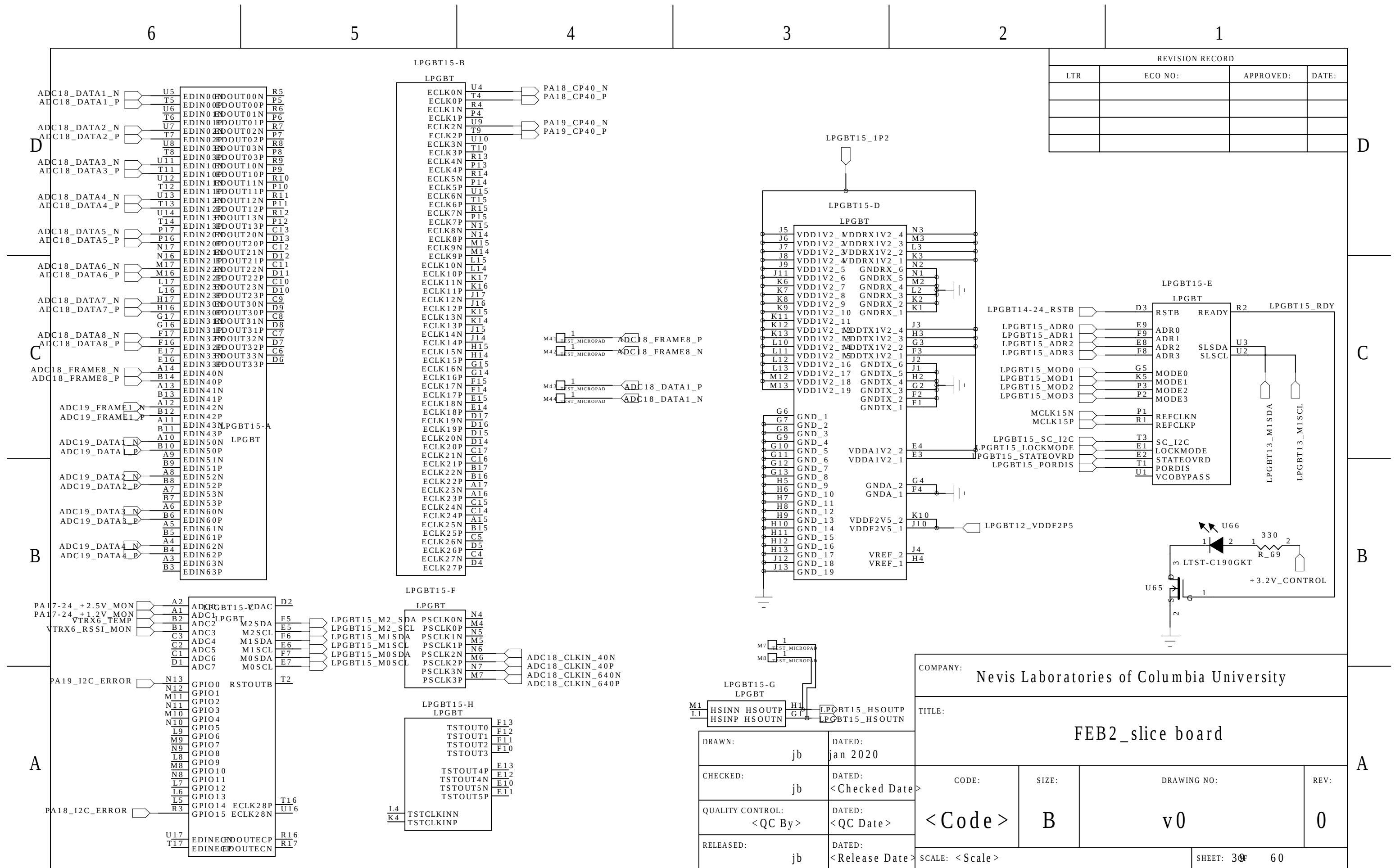
DRAWN:	DATED:
jb	jan 2020
CHECKED:	DATED:
jb	<Checked Date>
QUALITY CONTROL:	DATED:
<QC By>	<QC Date>
RELEASED:	DATED:
jb	<Release Date>

D

C

B

A



6

5

4

3

2

1

D

C

B

A

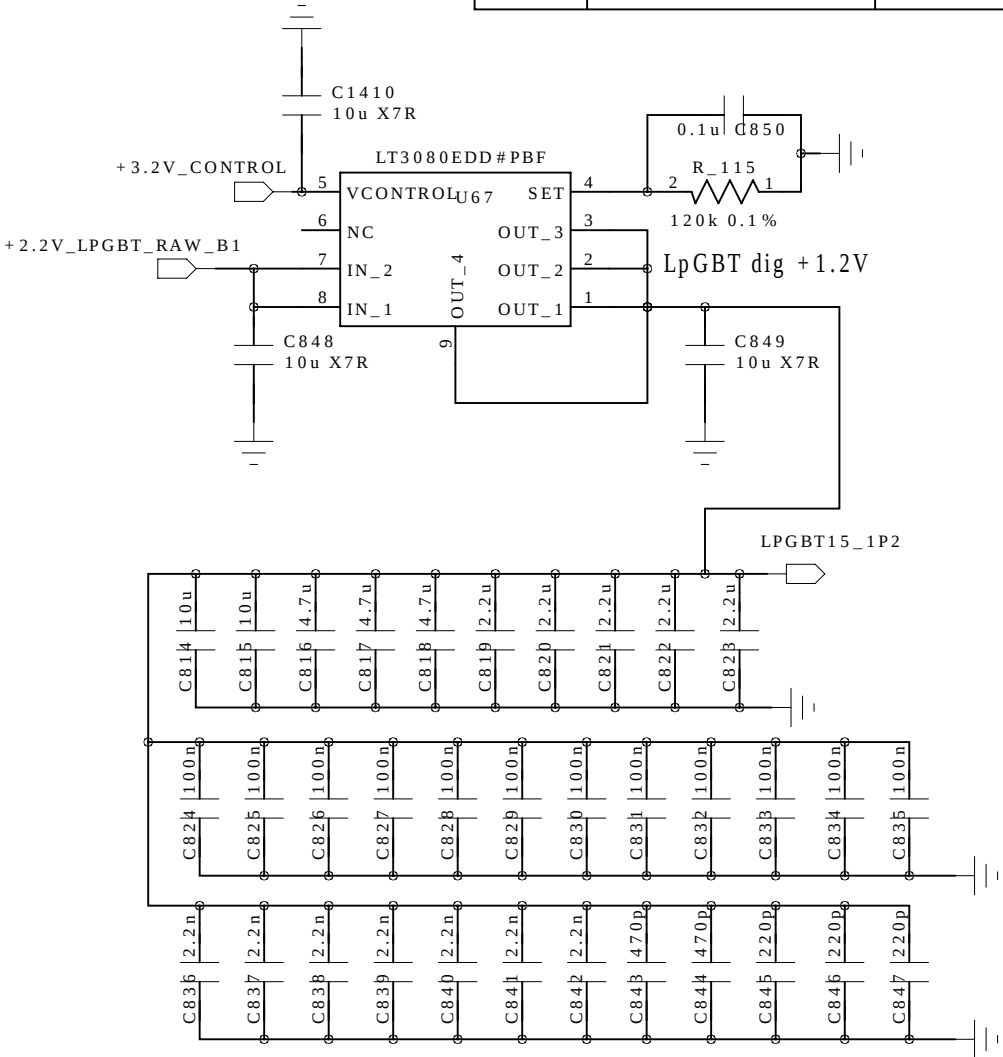
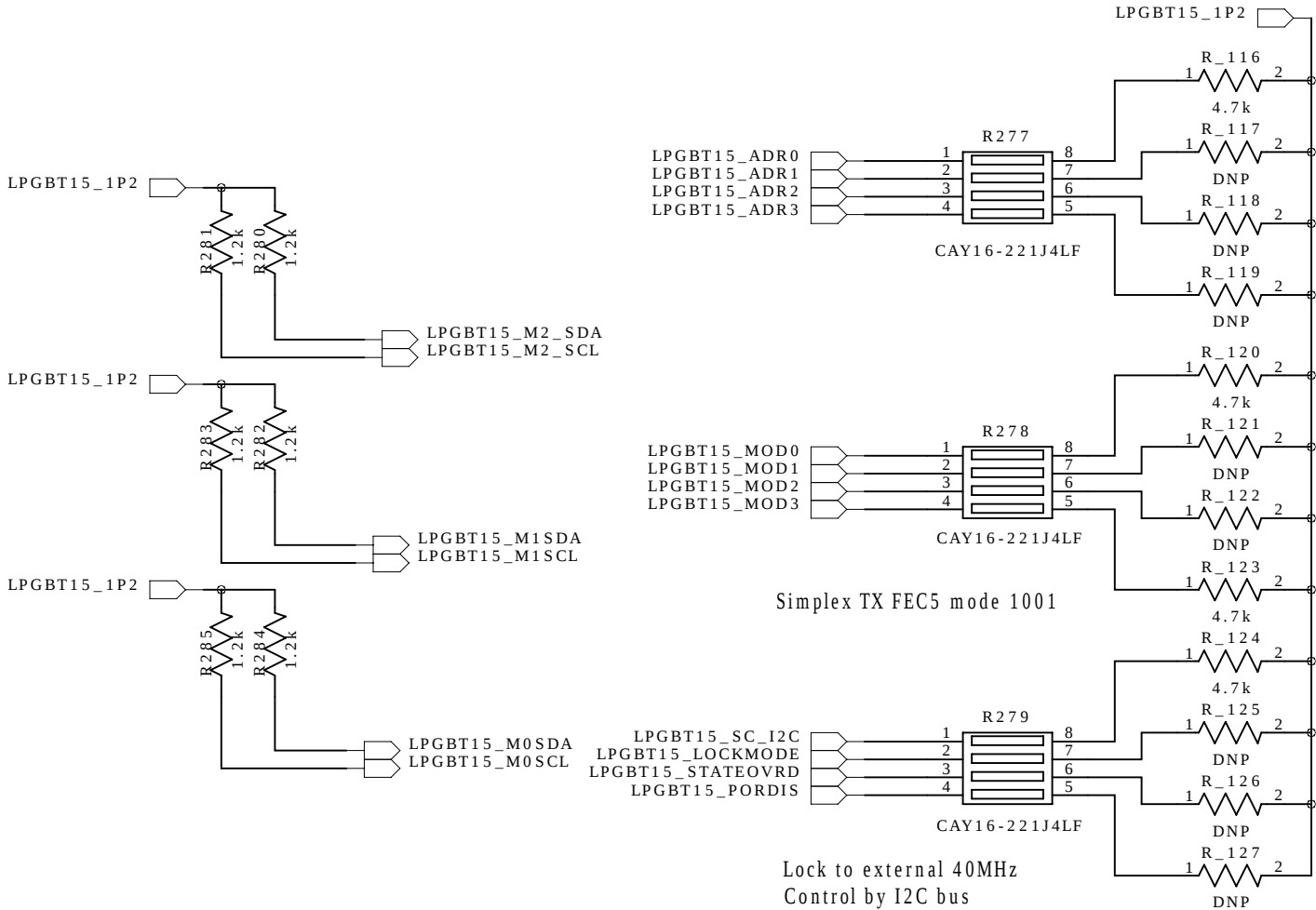
D

C

B

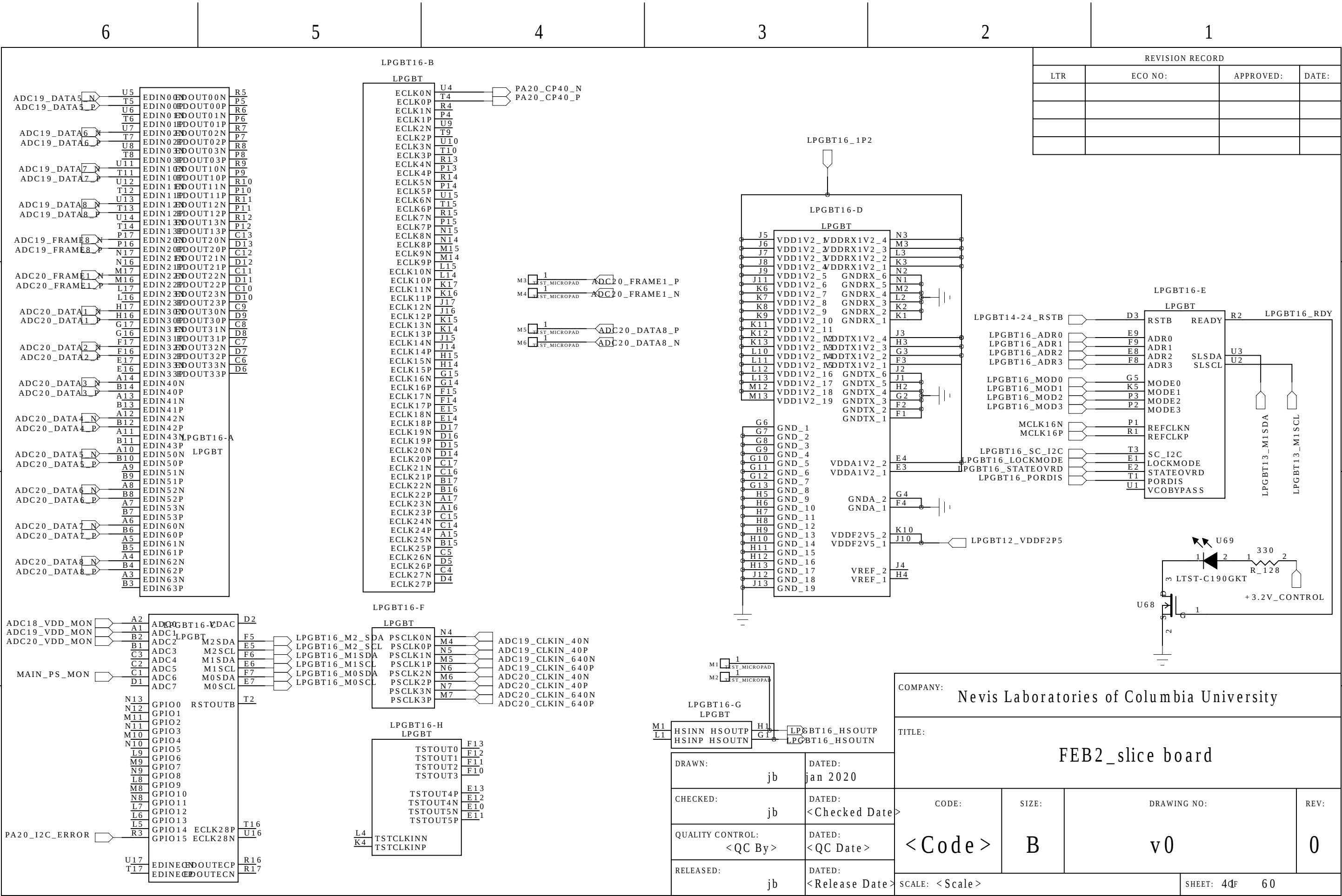
A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 40F 60

DRAWN:	DATED:
jb	jan 2020
CHECKED:	DATED:
jb	<Checked Date>
QUALITY CONTROL:	DATED:
<QC By>	<QC Date>
RELEASED:	DATED:
jb	<Release Date>



6

5

4

3

2

1

D

C

B

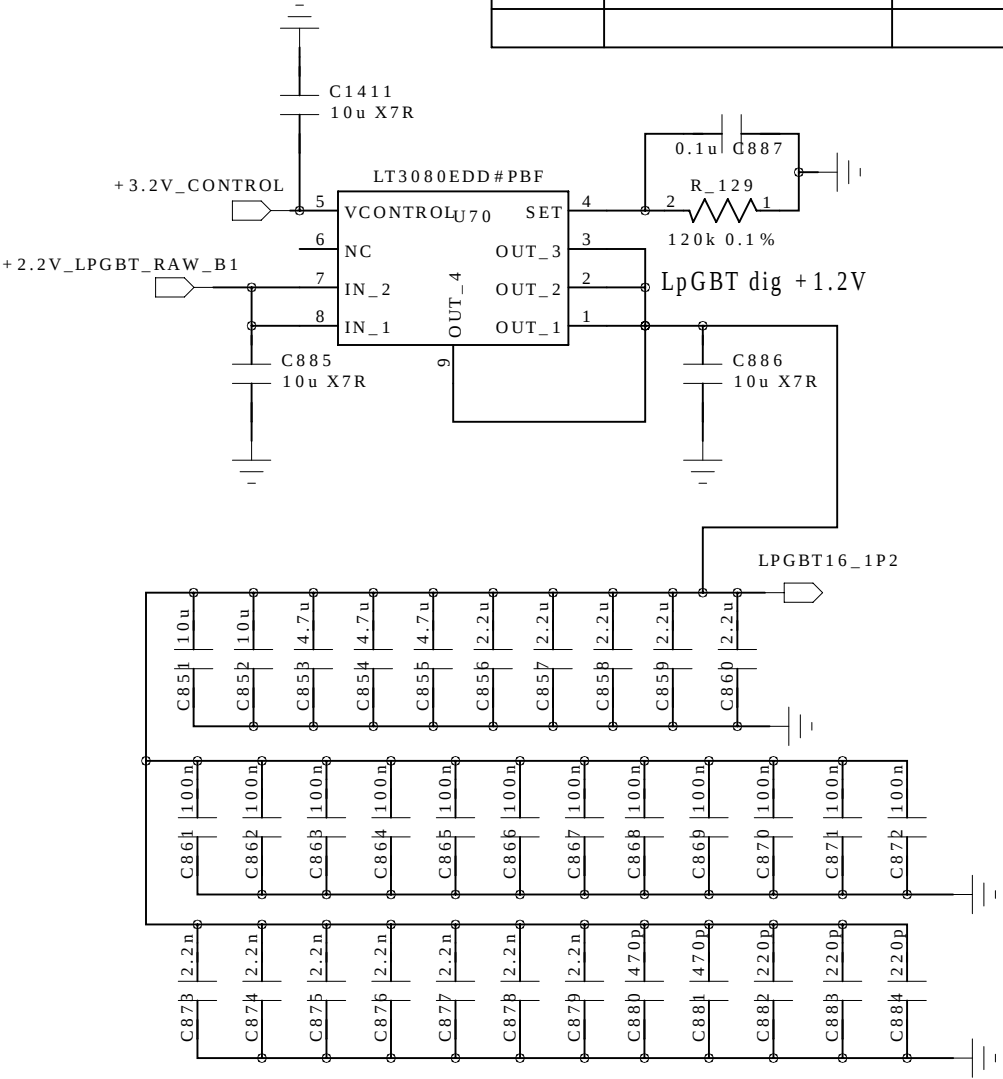
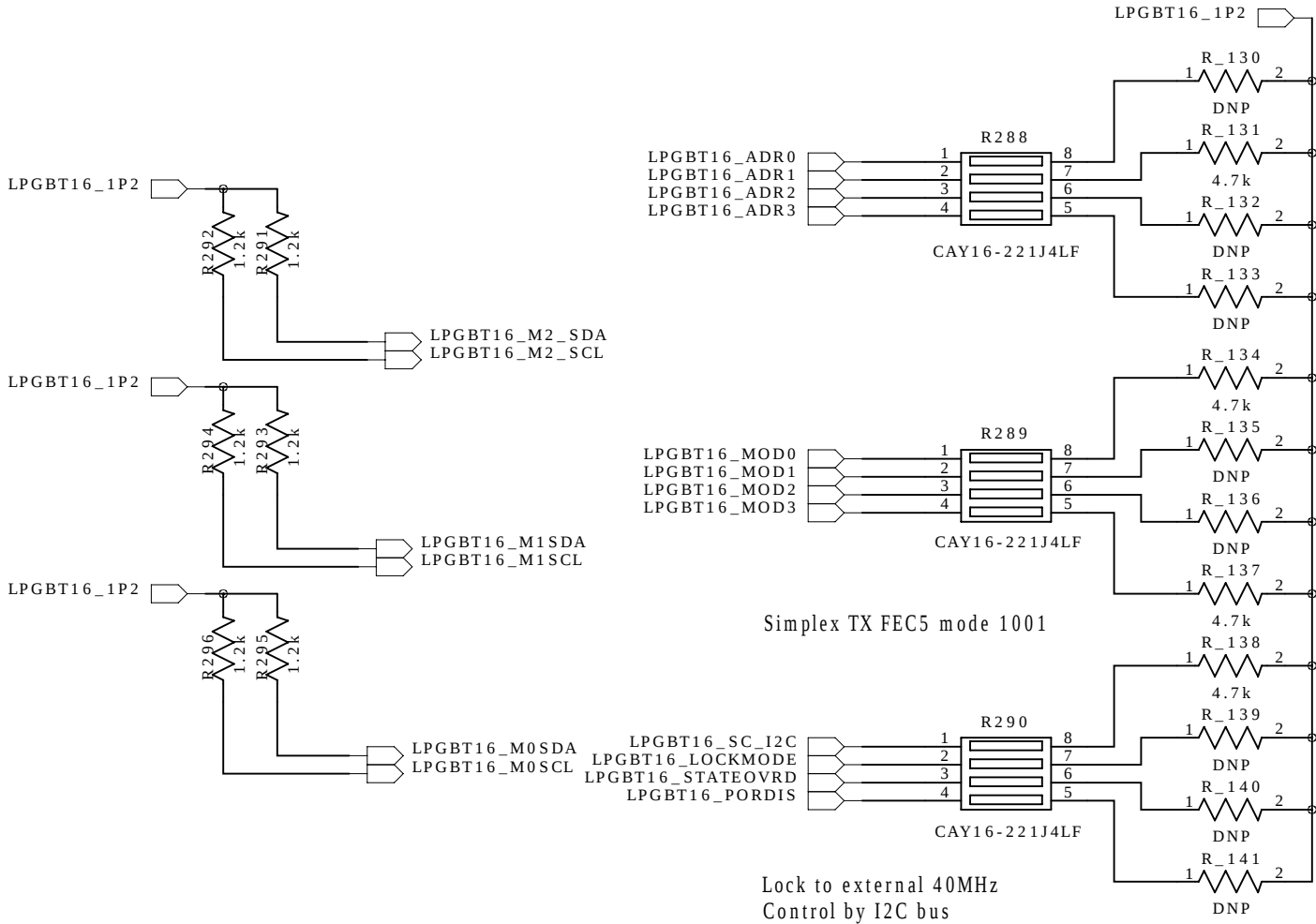
A

D

C

B

A



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 40 60	

DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

6

5

4

3

2

1

D

C

B

A

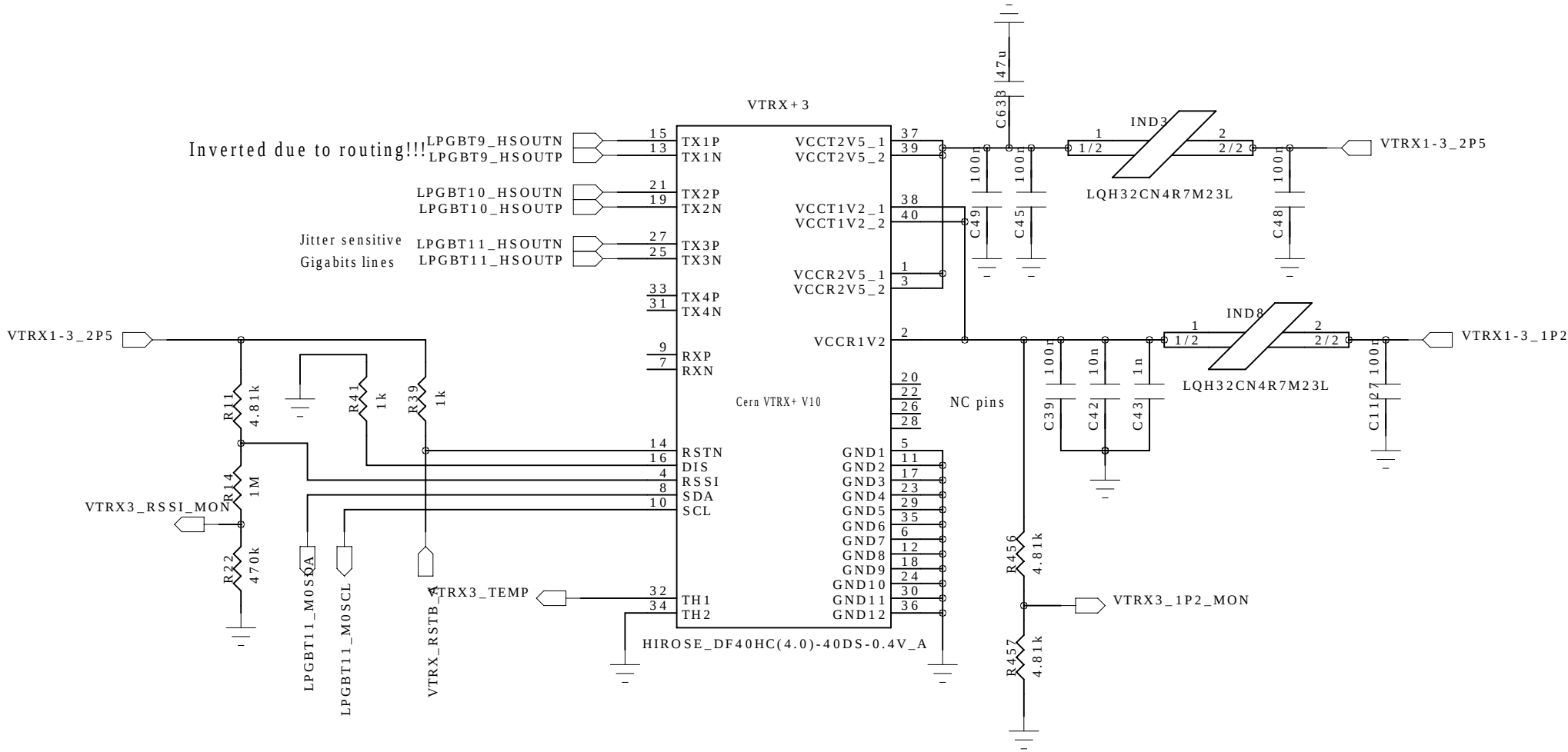
D

C

B

A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 40 60

DRAWN: jb	DATED: Jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

6

5

4

3

2

1

D

C

B

A

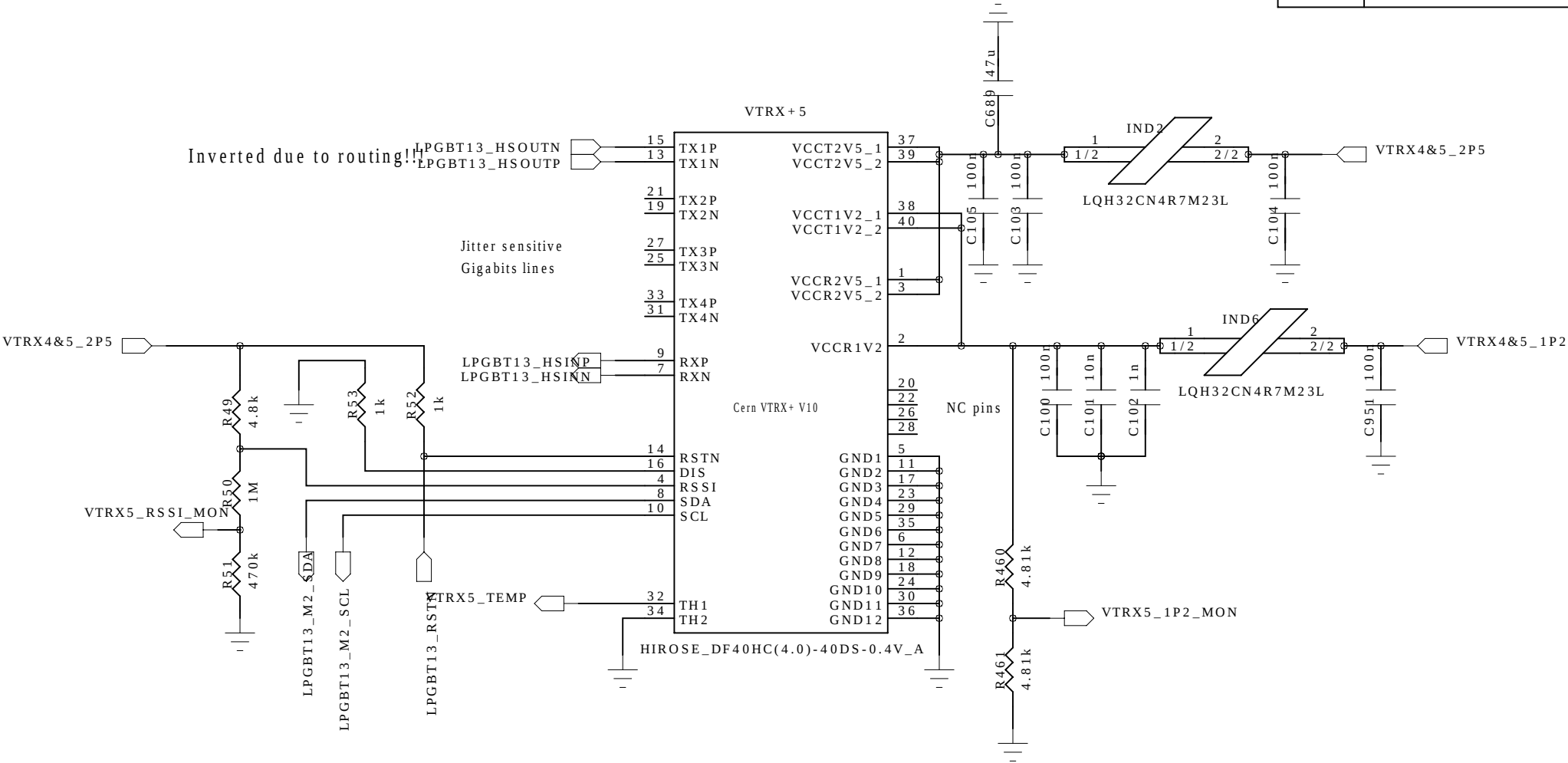
D

C

B

A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 45 60

DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

6

5

4

3

2

1

D

C

B

A

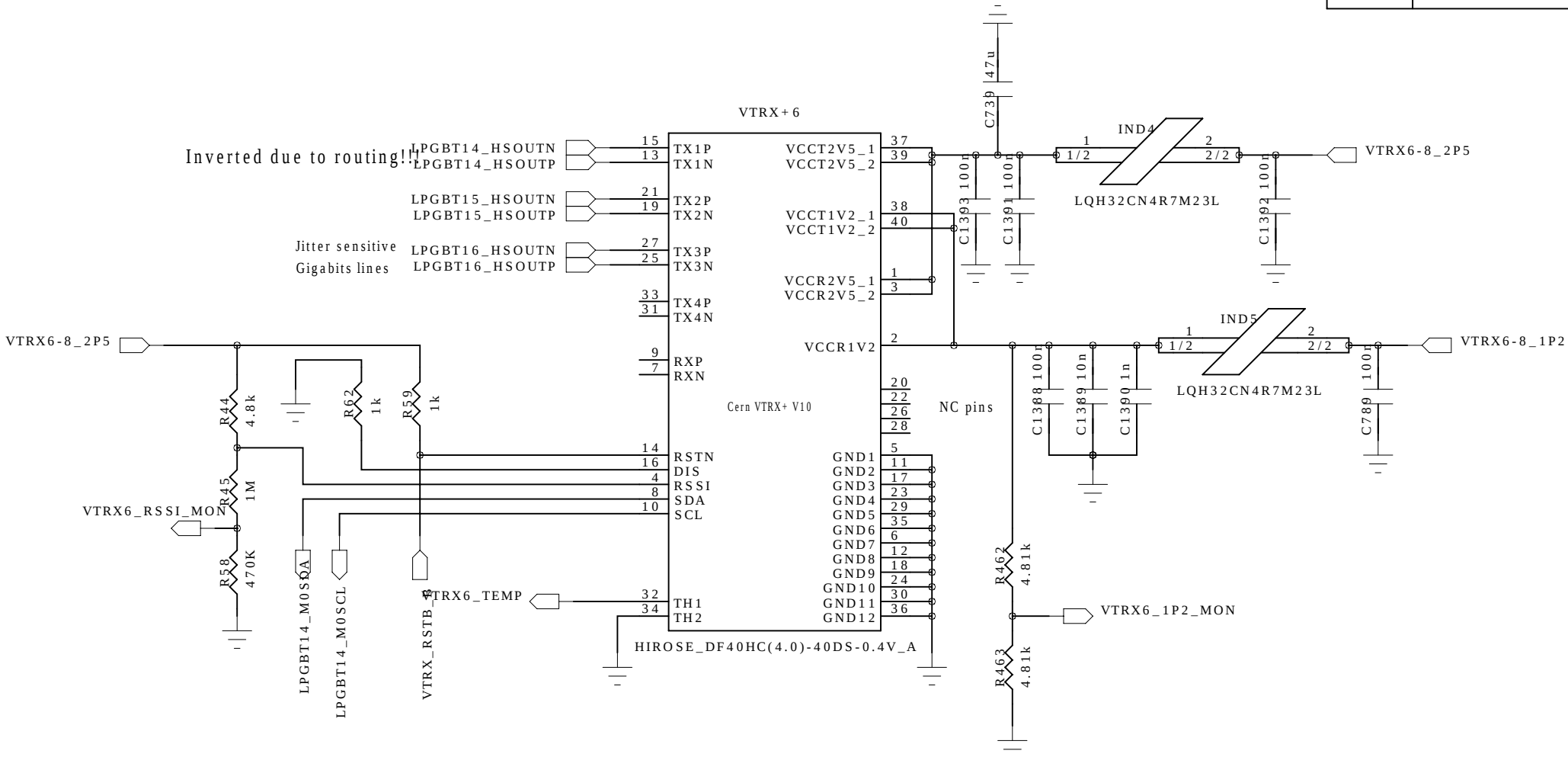
D

C

B

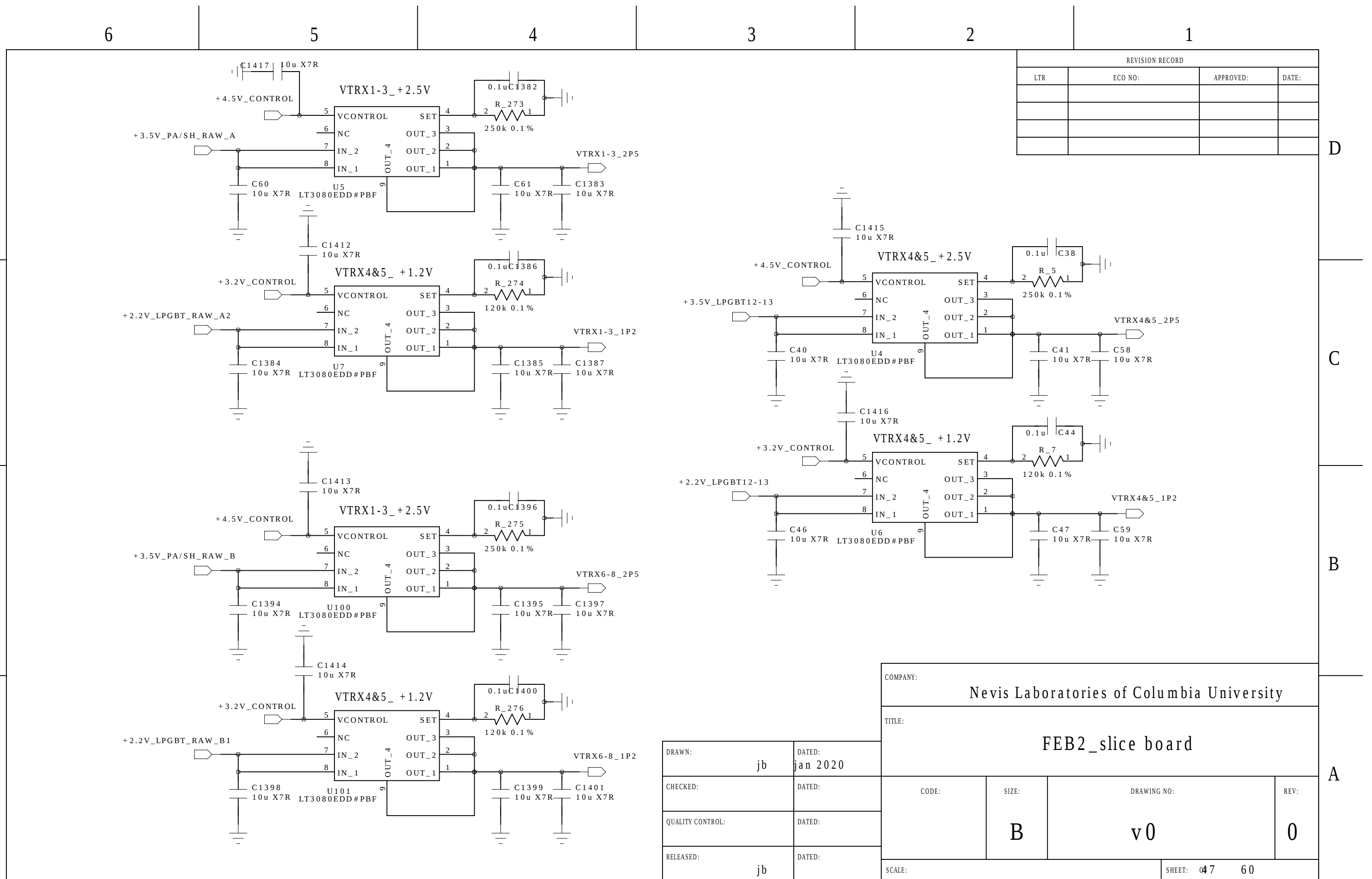
A

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>			SHEET: 46 60

DRAWN: jb	DATED: Jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

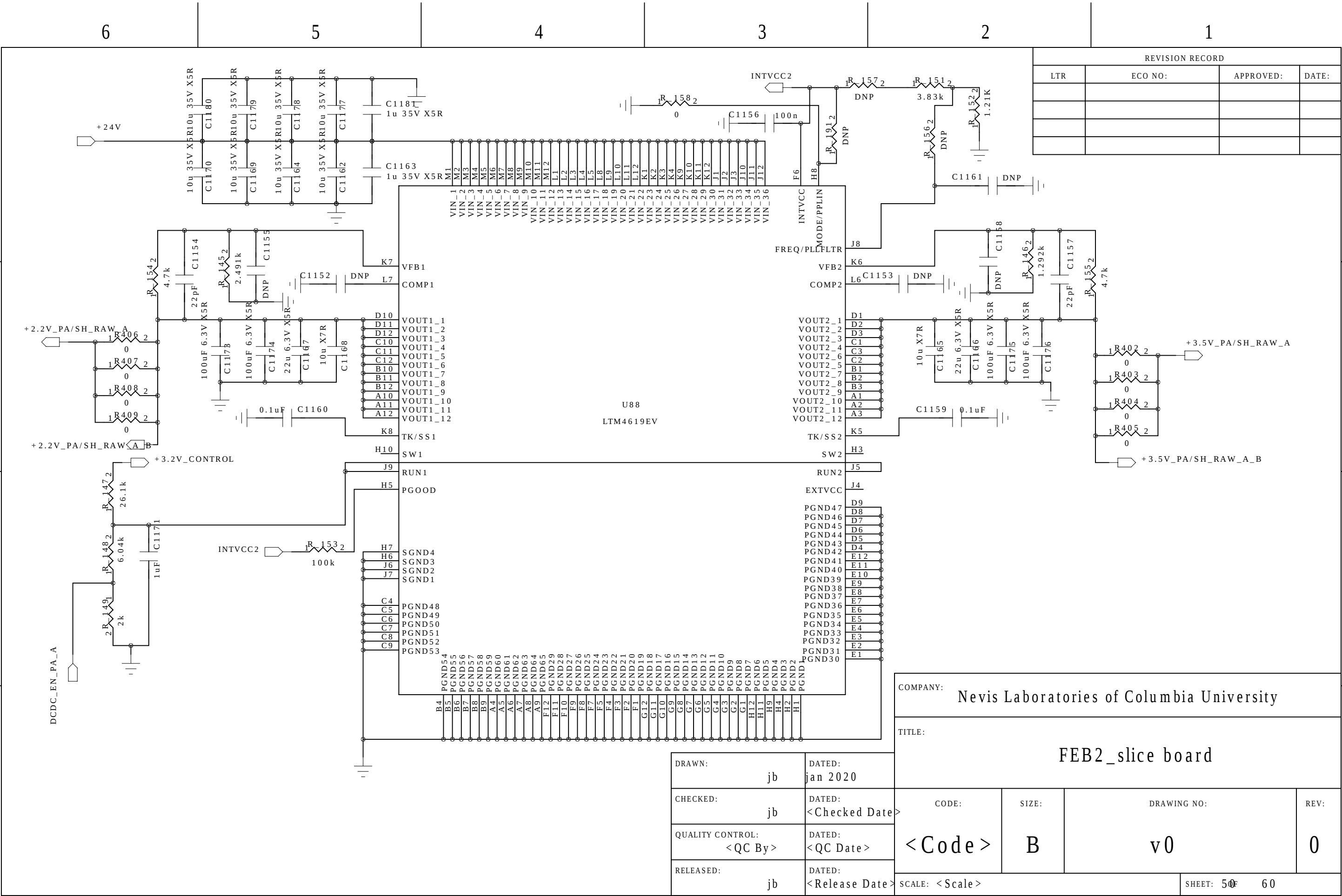


D

C

B

A



D

C

B

A

D

C

B

A

6

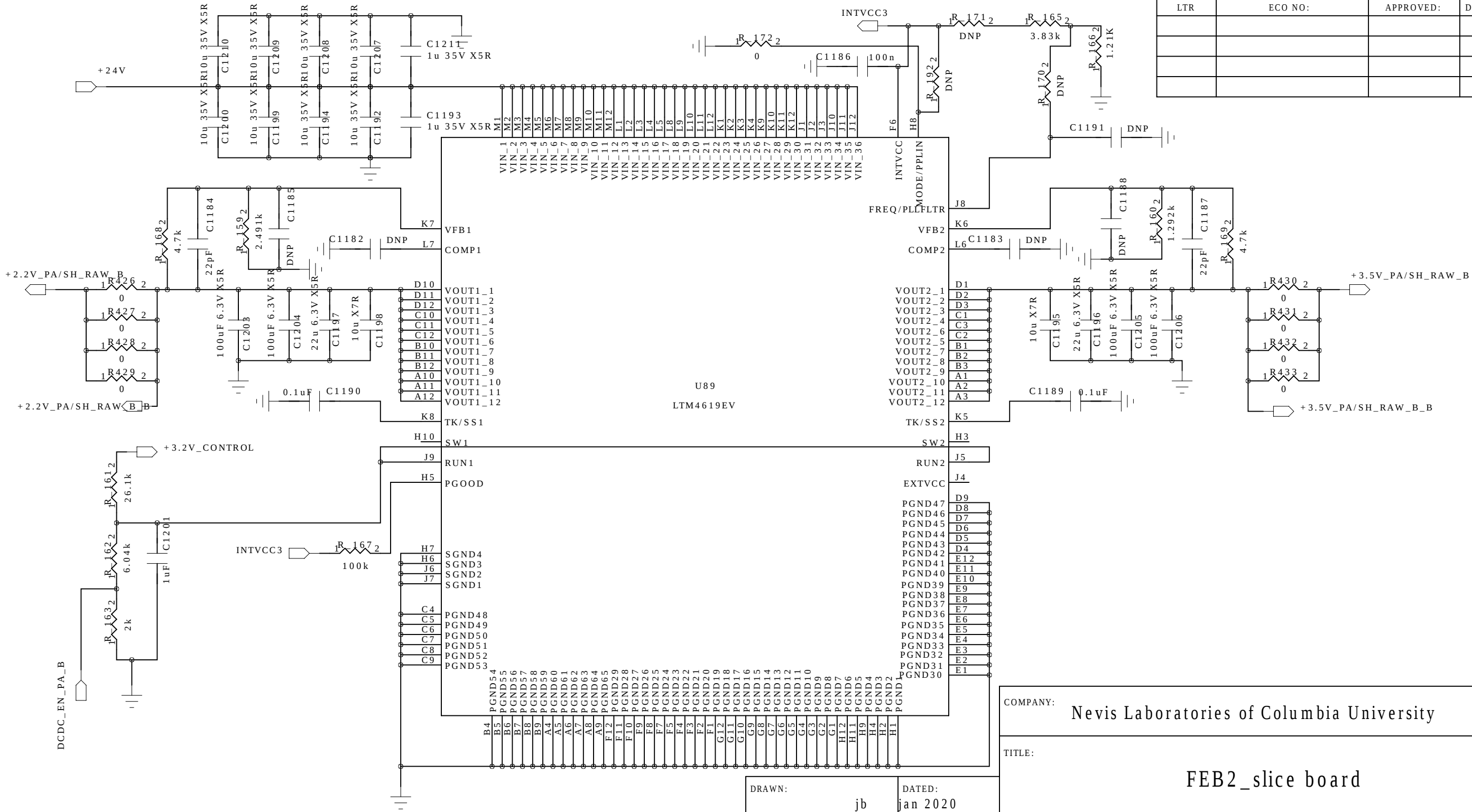
5

4

3

2

1



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

C

B

A

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 5 of 60	

DRAWN: jb	DATED: Jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

D

C

B

A

6

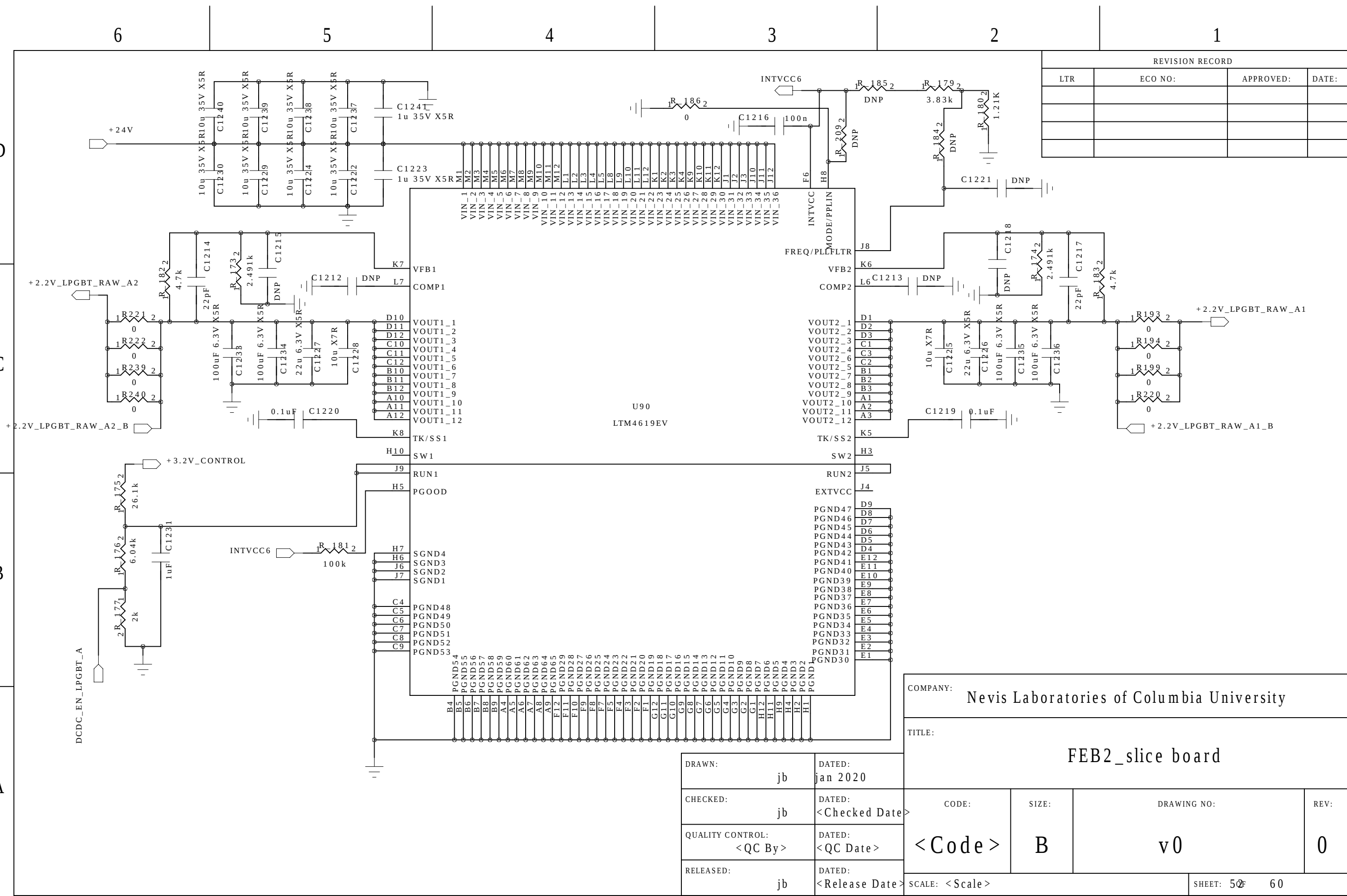
5

4

3

2

1



D

C

B

A

D

C

B

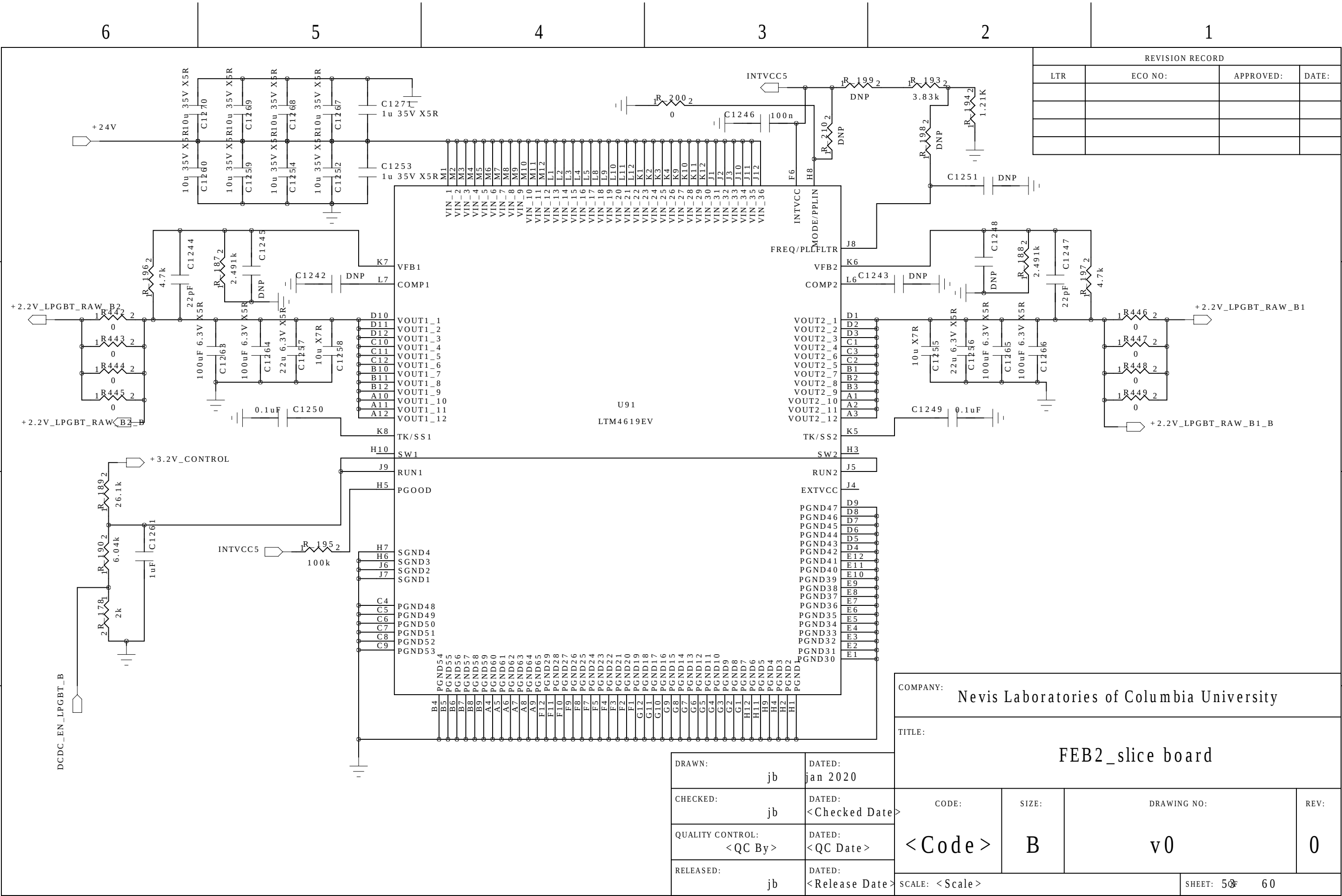
A

D

C

B

A



D

C

B

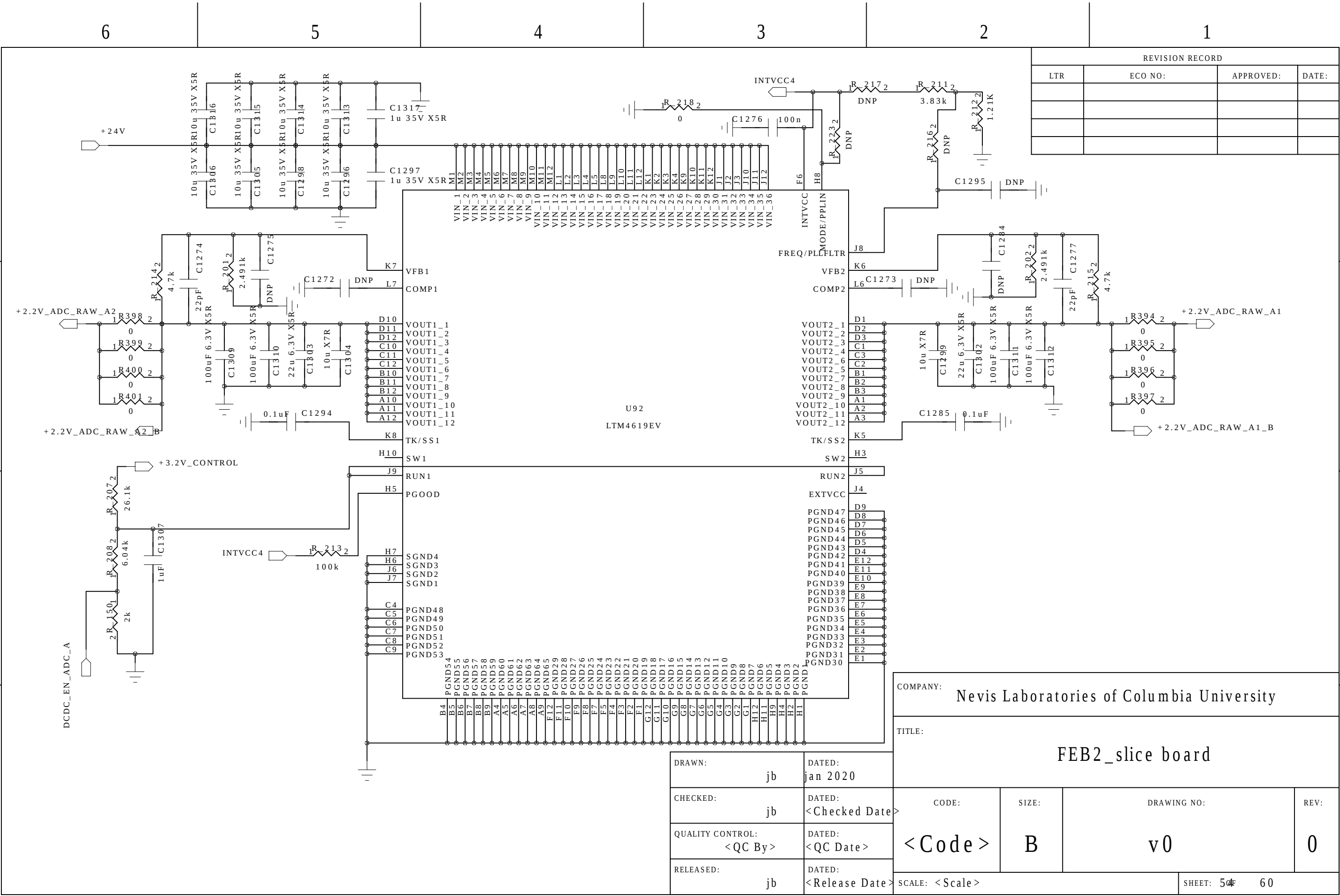
A

D

C

B

A



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 50 of 60	

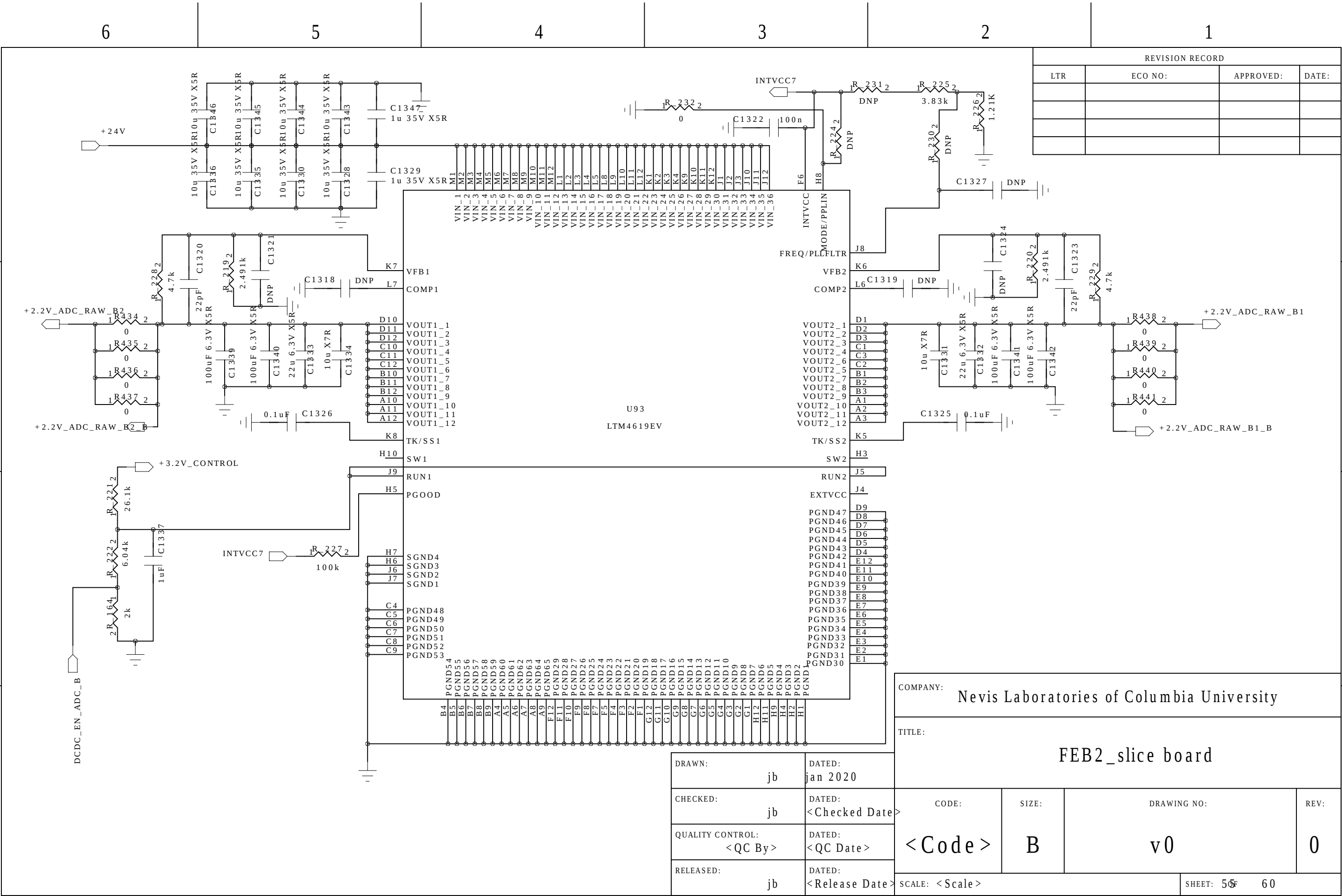
DRAWN: jb	DATED: Jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>

D

C

B

A

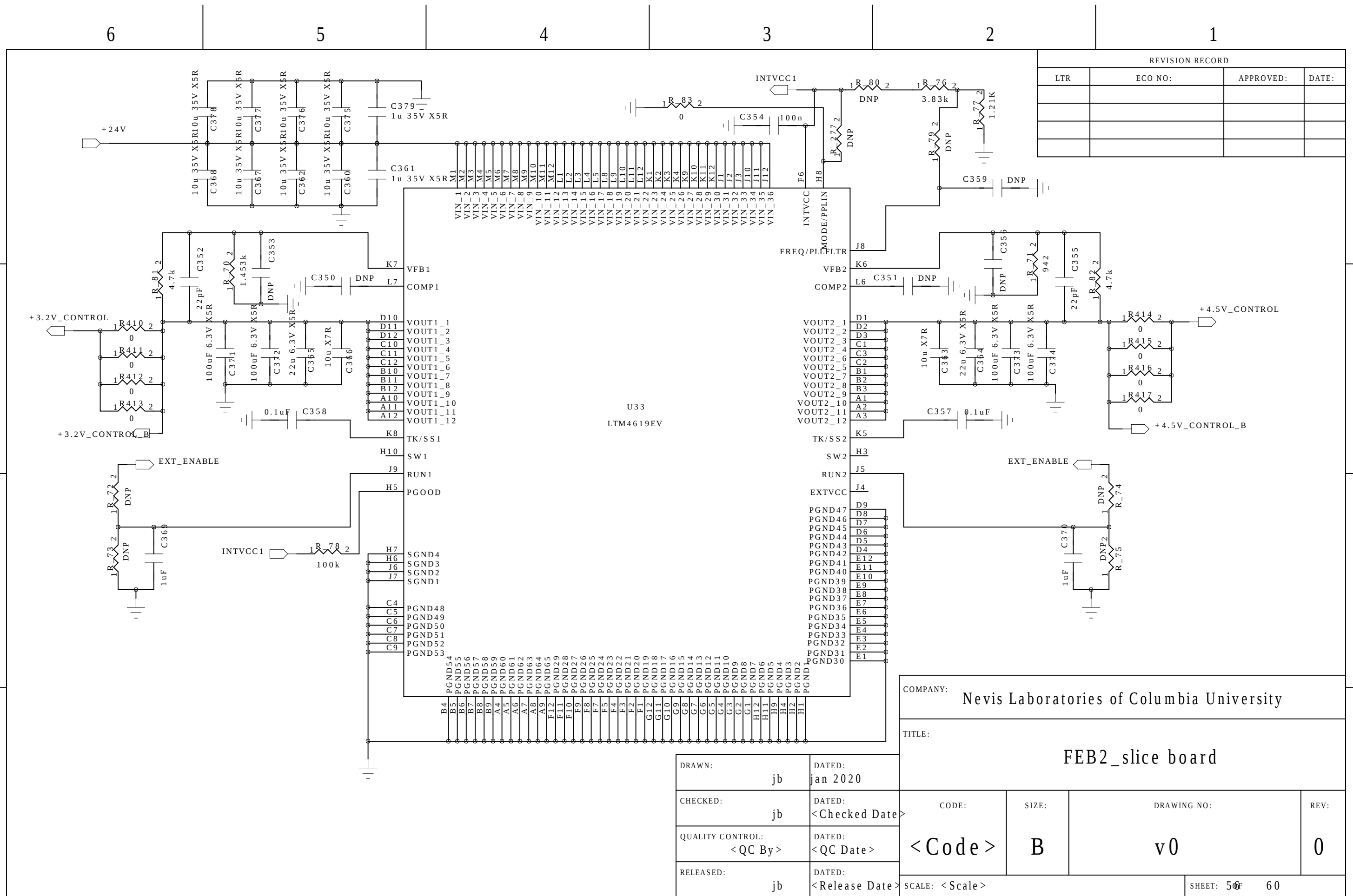


D

C

B

A



D

C

B

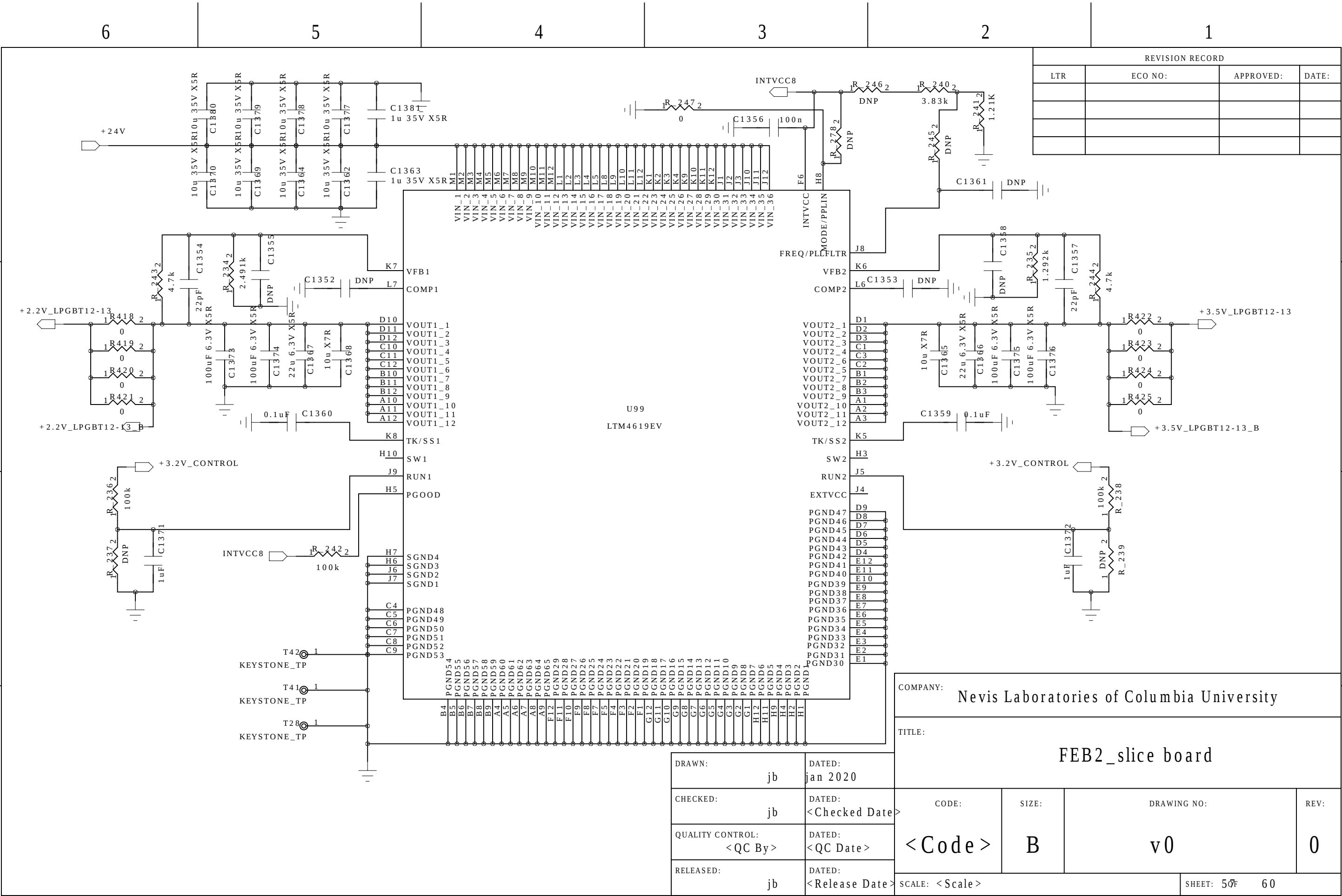
A

D

C

B

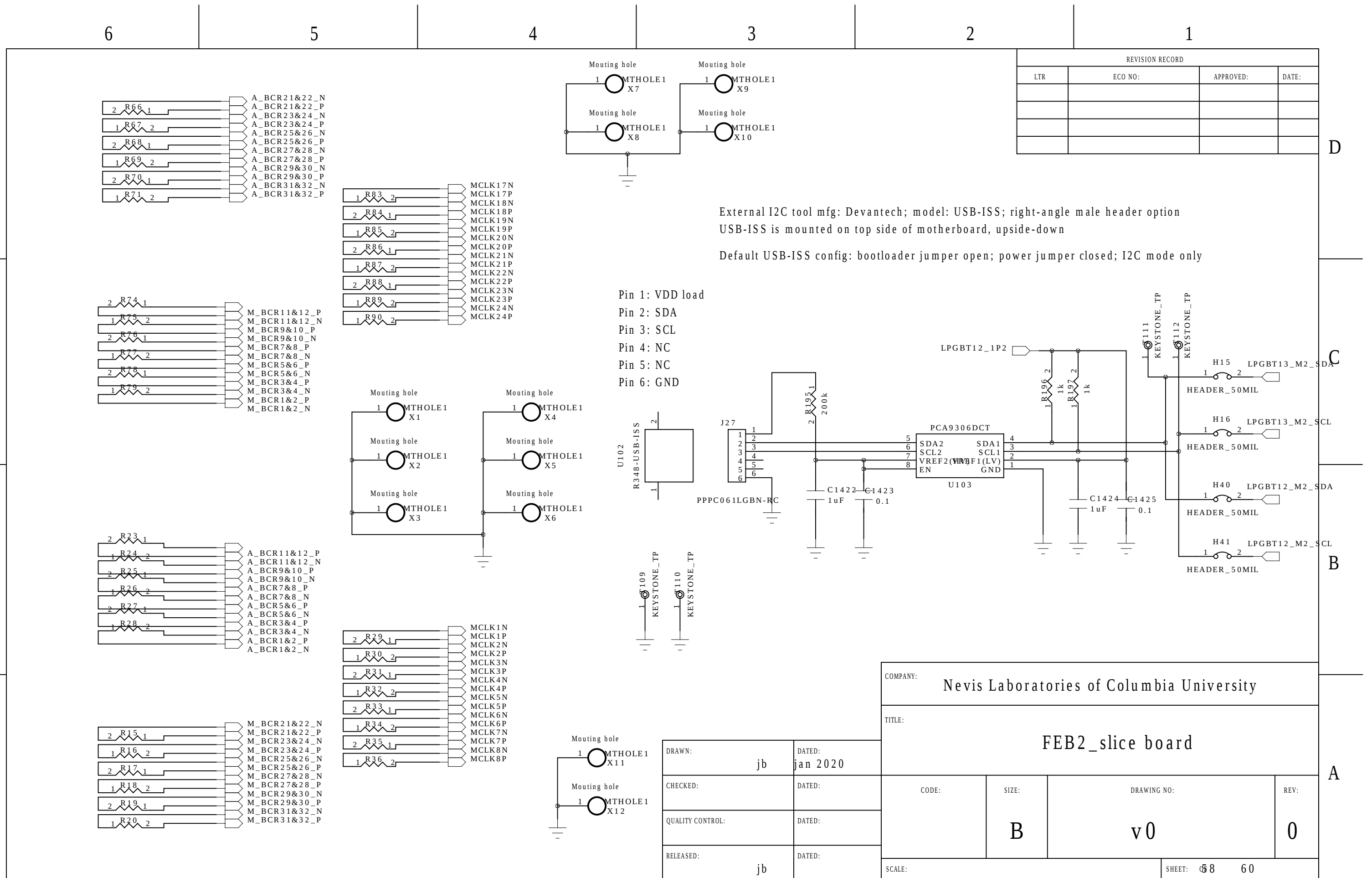
A



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE: <Code>	SIZE: B	DRAWING NO: v0	REV: 0
SCALE: <Scale>		SHEET: 50 60	

DRAWN: jb	DATED: jan 2020
CHECKED: jb	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: jb	DATED: <Release Date>



D

C

B

A

6

5

4

3

2

1

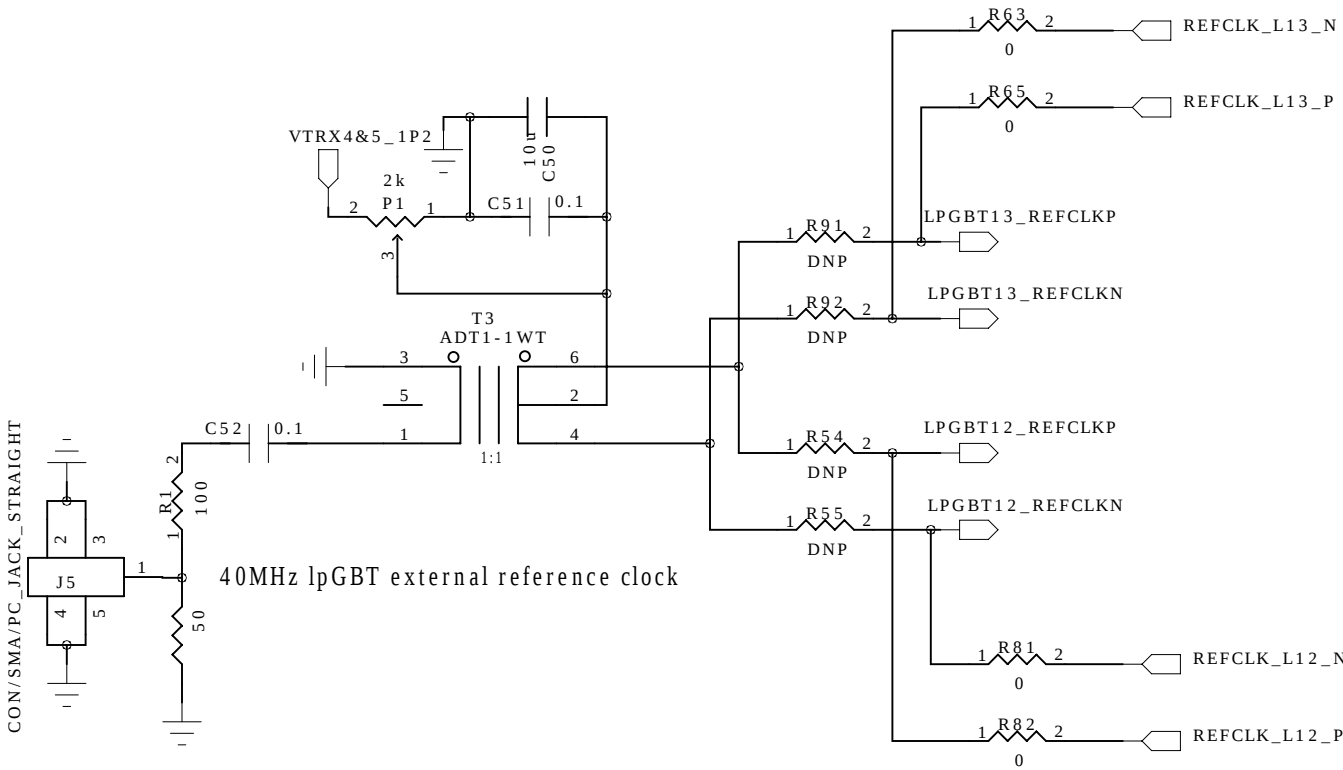
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

C

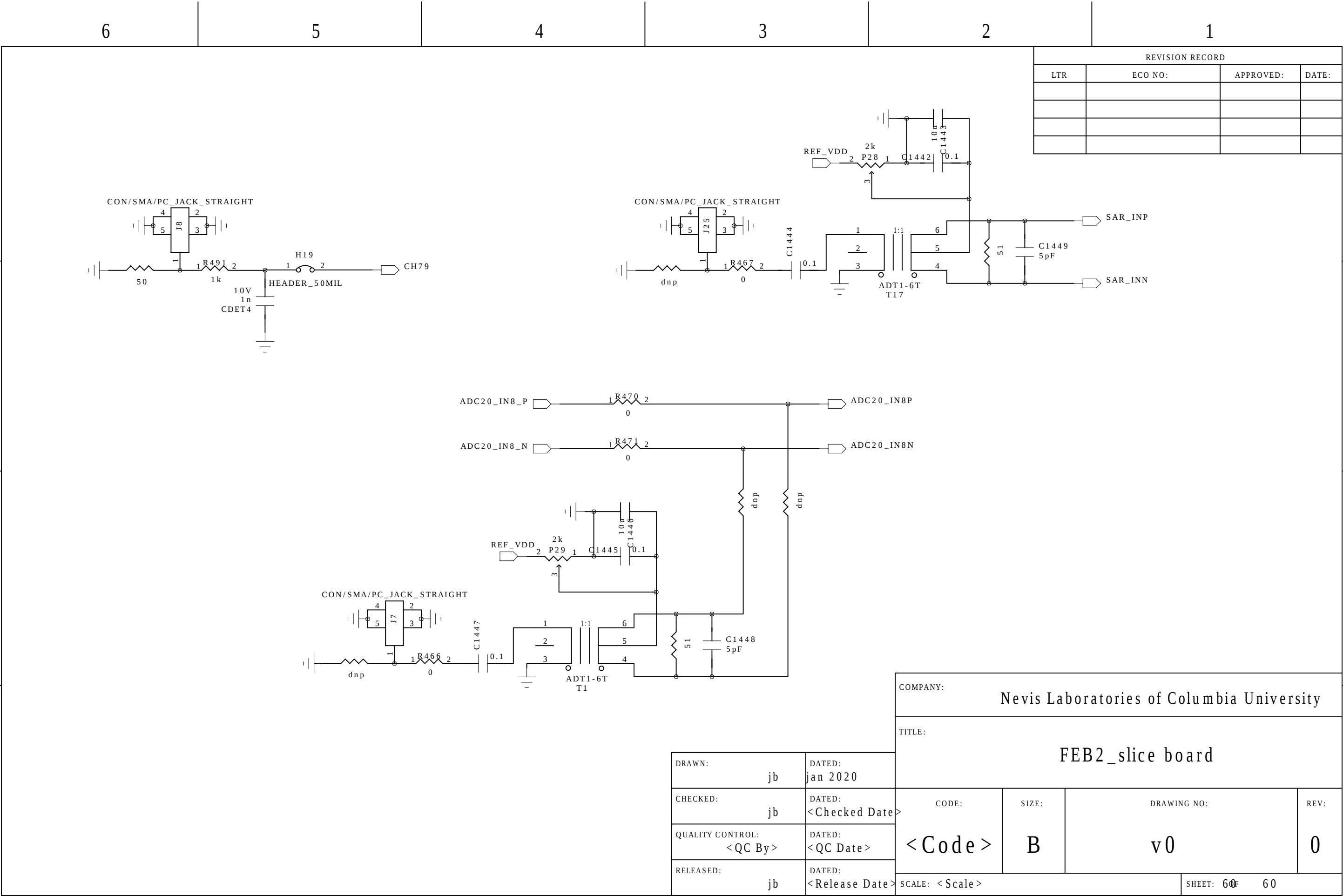
B

A



DRAWN:	jb	DATED:	jan 2020
CHECKED:	jb	DATED:	<Checked Date>
QUALITY CONTROL:	<QC By>	DATED:	<QC Date>
RELEASED:	jb	DATED:	<Release Date>

COMPANY: Nevis Laboratories of Columbia University			
TITLE: FEB2_slice board			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	B	v0	0
SCALE: <Scale>		SHEET: 9 60	



COMPANY:

Nevis Laboratories of Columbia University

TITLE:

FEB2_slice board

DRAWN:

jb

CHECKED:

jb

QUALITY CONTROL:

<QC By>

RELEASED:

jb

DATED:

jan 2020

DATED:

<Checked Date>

DATED:

<QC Date>

DATED:

<Release Date>

CODE:

SIZE:

DRAWING NO:

REV:

<Code>

B

v0

0

SCALE: <Scale>

SHEET: 60

60

D

C

B

A

D

C

B

A