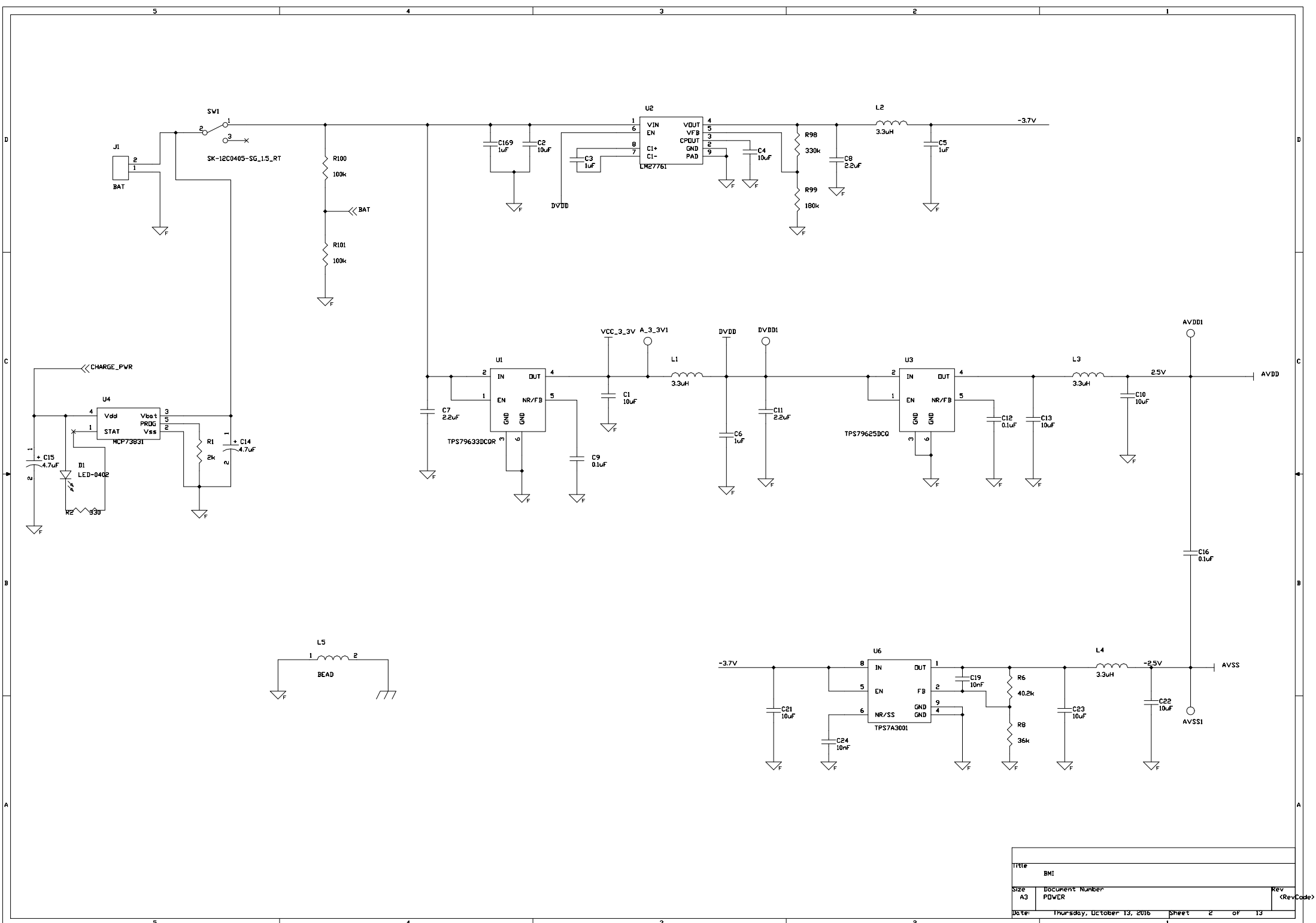


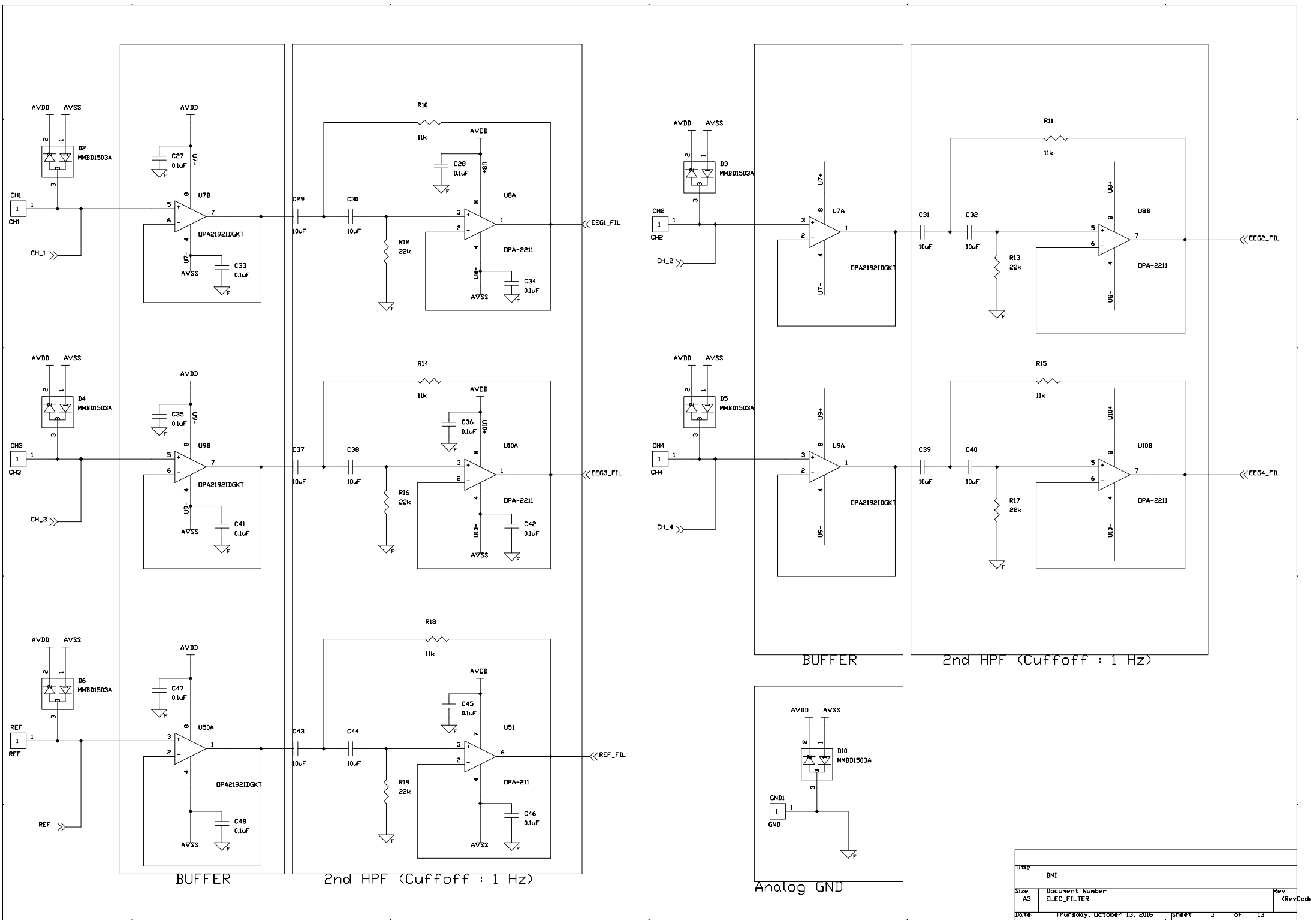
PT\_4ch Schematic (Pre-amp)  
(with BT 2.0)

< Ver0\_1 >

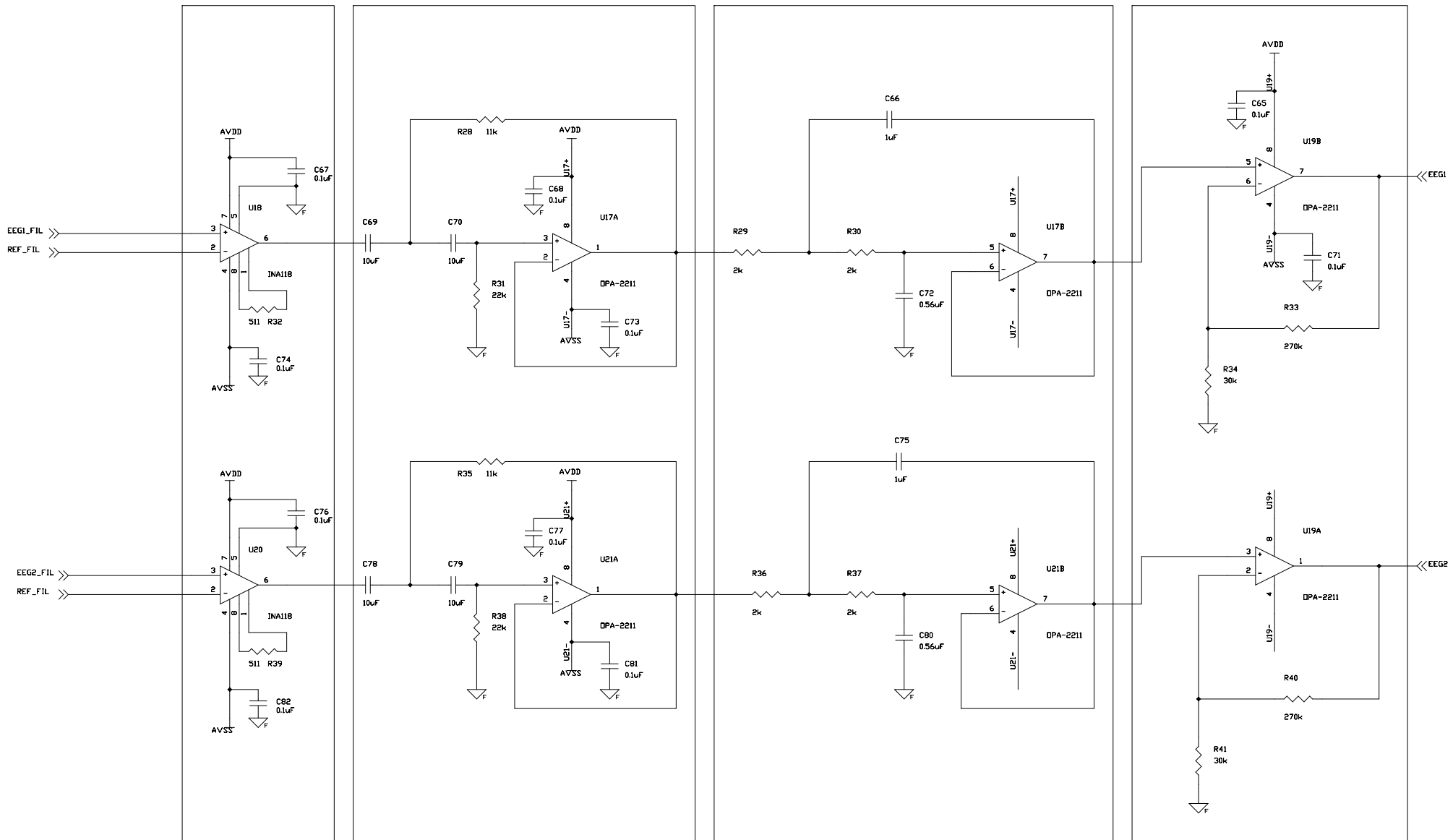
by Y.S. Ku and C.H Kwon



Title		BMI	
Size	Document Number	Rev	
A3	POWER	<RevCode>	
Date:	Thursday, October 13, 2016	Sheet	2 of 13



Title		BMI
Size	Document Number	Rev
A3	ELEC_FILTER	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 3 of 13



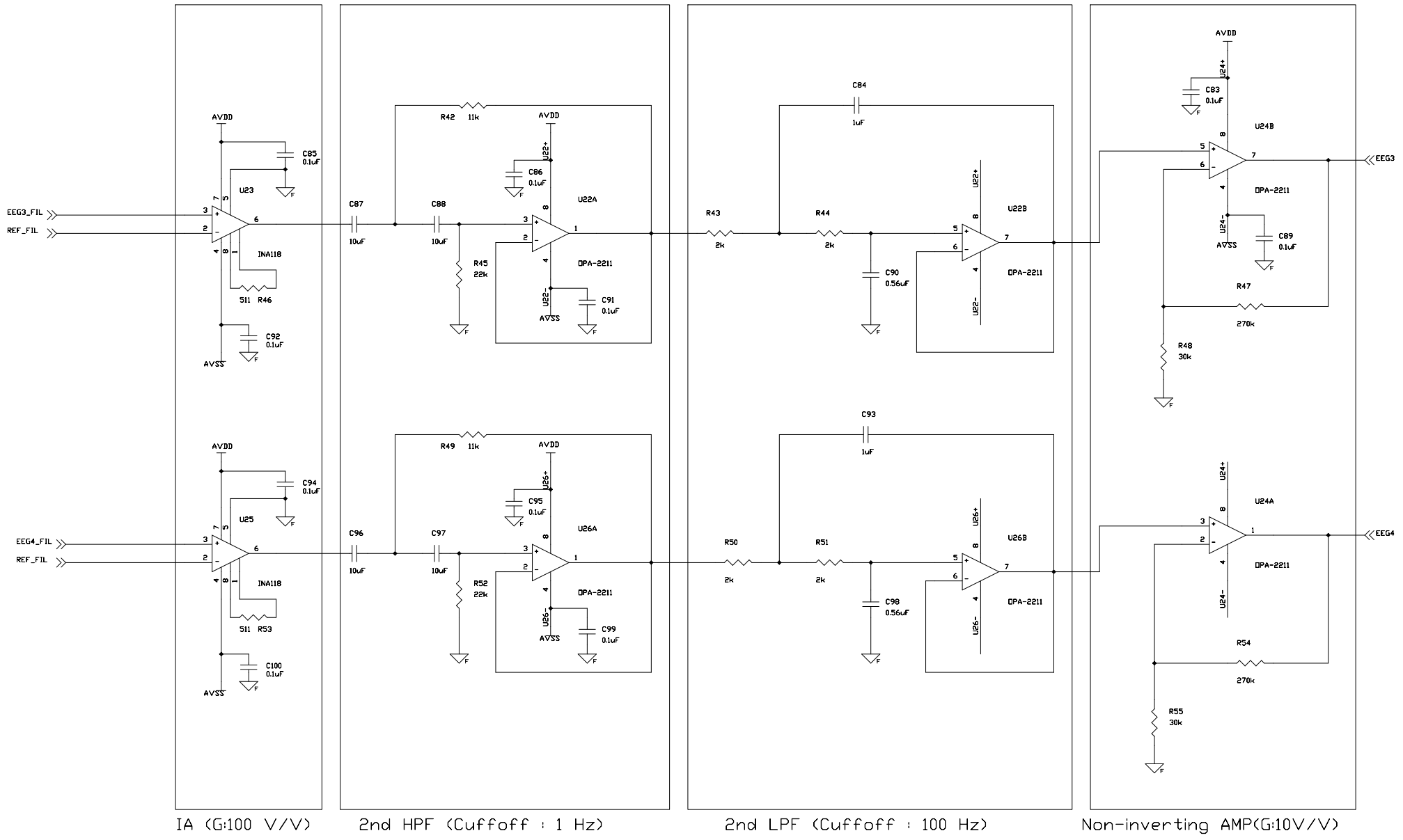
IA (G:100 V/V)

2nd HPF (Cutoff : 1 Hz)

2nd LPF (Cutoff : 100 Hz)

Non-inverting AMP(G:10V/V)

Title	<Title>	
Size	Document Number	Rev
A3	<Doc>	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 5 of 13



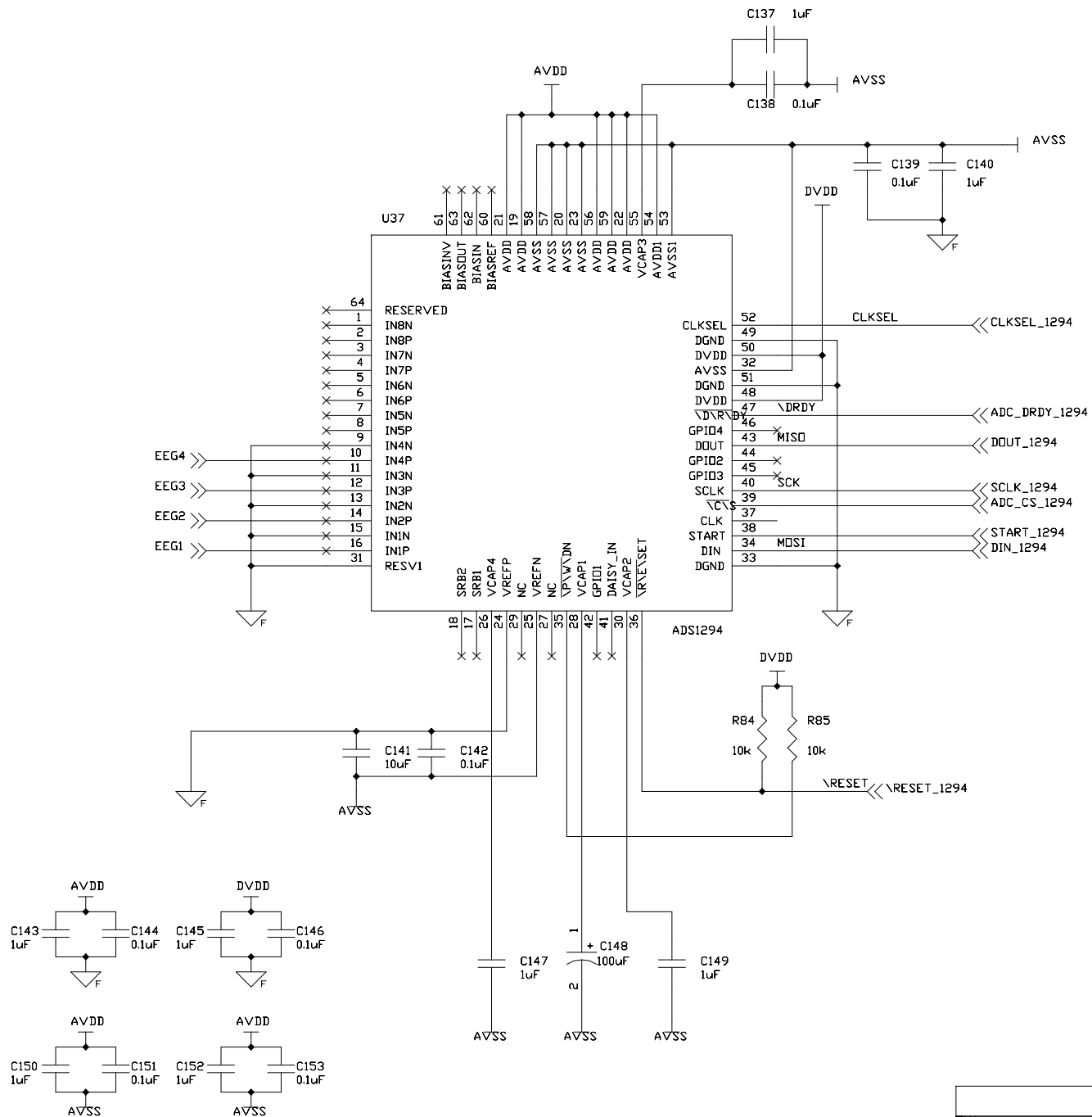
IA (G:100 V/V)

2nd HPF (Cutoff : 1 Hz)

2nd LPF (Cutoff : 100 Hz)

Non-inverting AMP (G:10V/V)

Title	<Title>	
Size	Document Number	Rev
A3	<Doc>	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 6 of 13



Title		
BMI		
Size	Document Number	Rev
A4	ADS1299	<Rev Code>
Date:	Thursday, October 13, 2016	Sheet 9 of 13

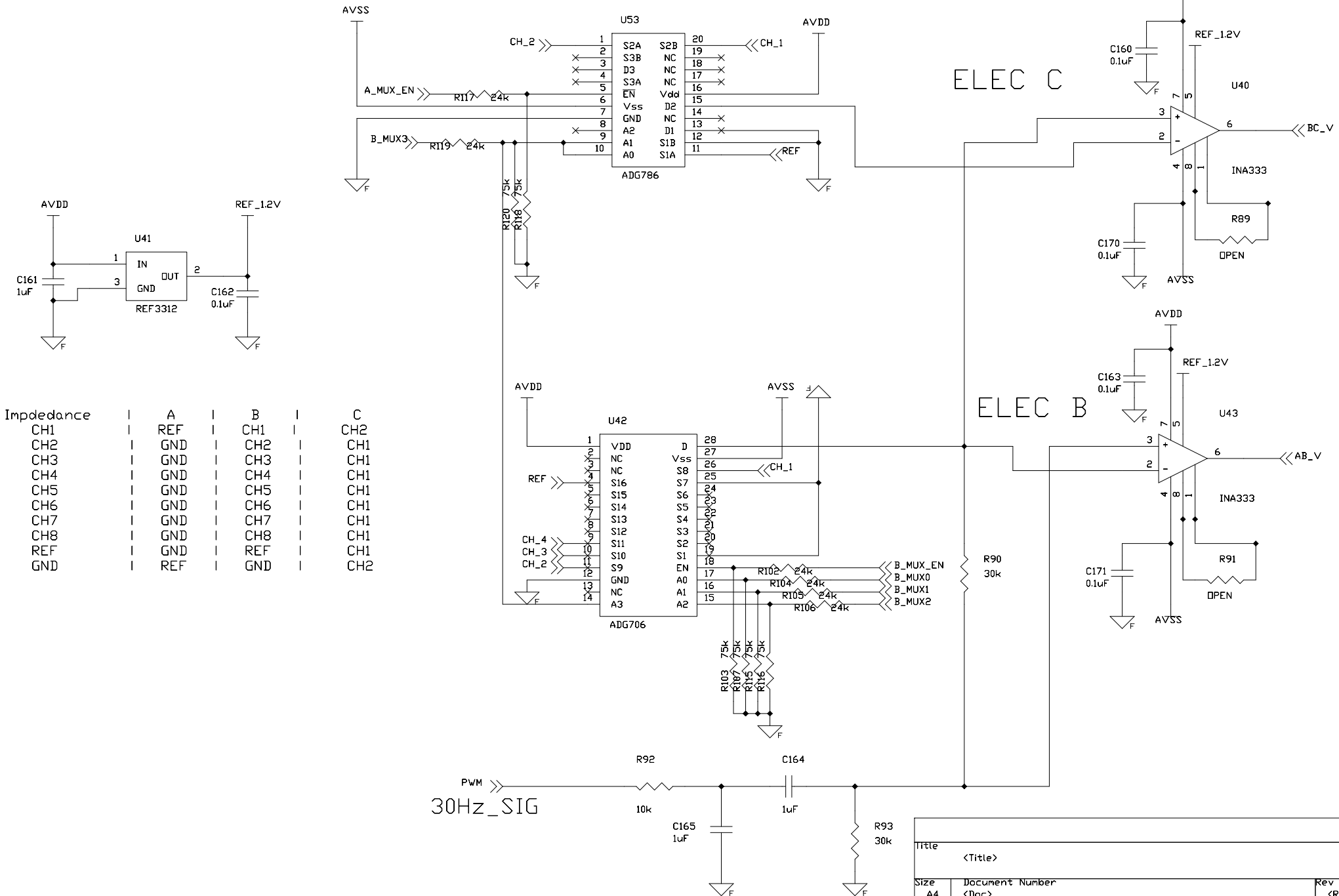


Title		
BMI		
Size	Document Number	Rev
A	ATmega168	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 10 of 13

# ELEC A

# ELEC C

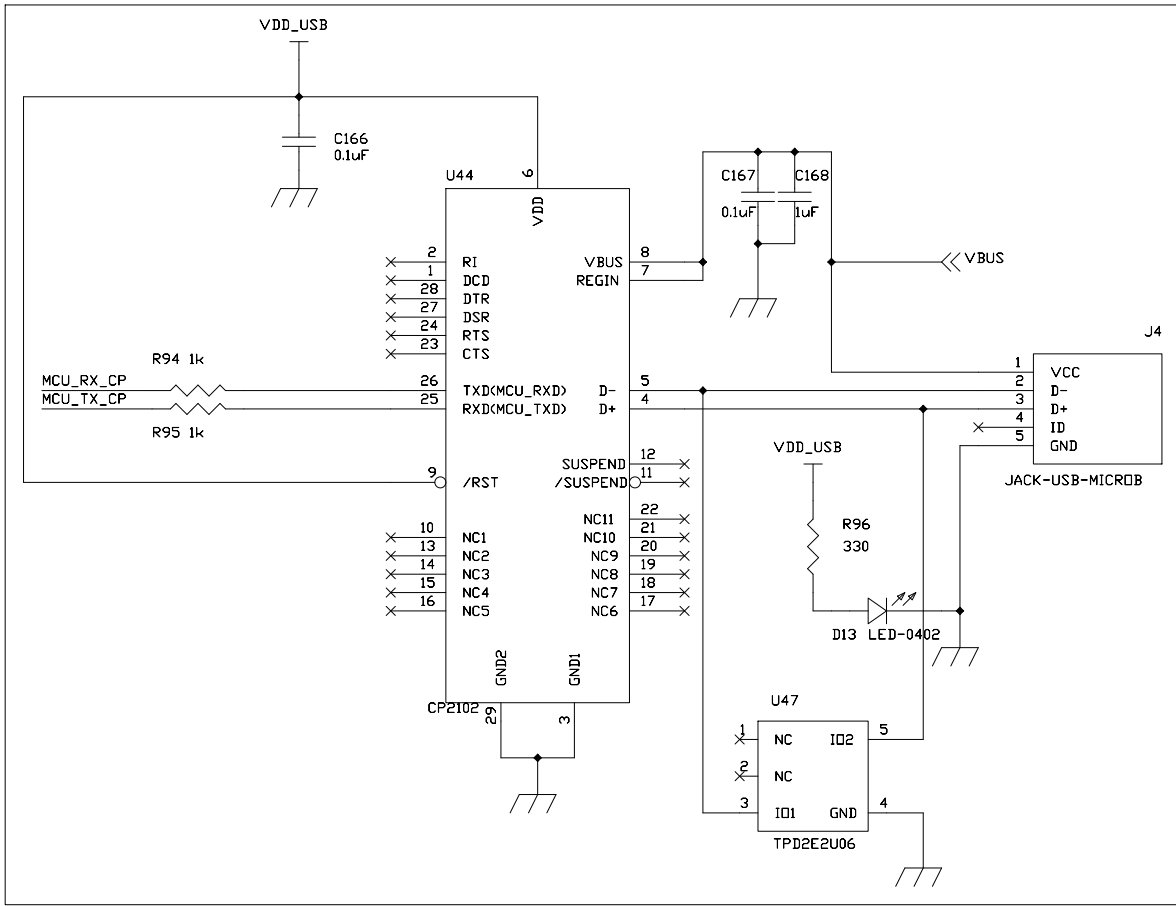
# ELEC B



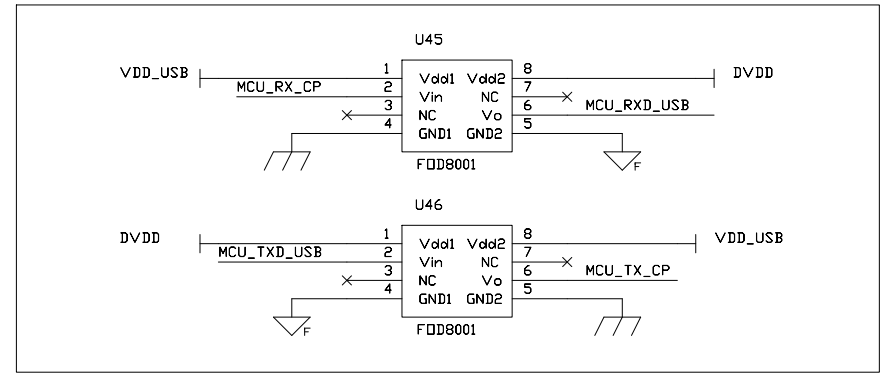
Impedance	A	B	C
CH1	REF	CH1	CH2
CH2	GND	CH2	CH1
CH3	GND	CH3	CH1
CH4	GND	CH4	CH1
CH5	GND	CH5	CH1
CH6	GND	CH6	CH1
CH7	GND	CH7	CH1
CH8	GND	CH8	CH1
REF	GND	REF	CH1
GND	REF	GND	CH2



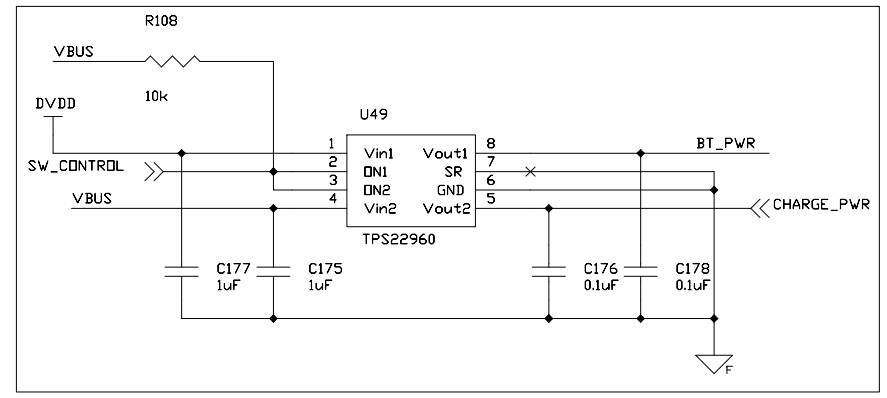
### USB TO UART BRIDGE



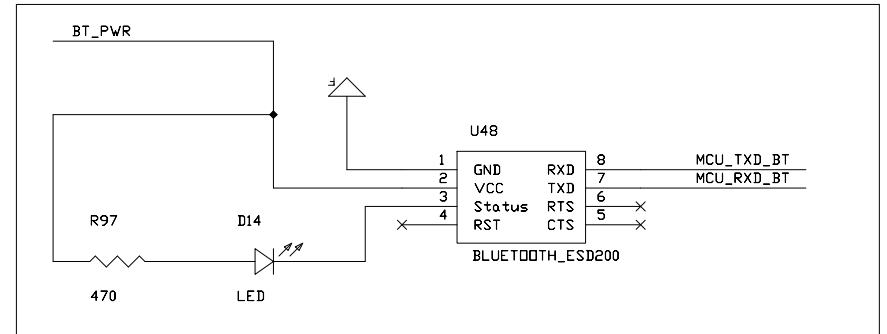
### OPTOCOUPLER FOR ISOLATION



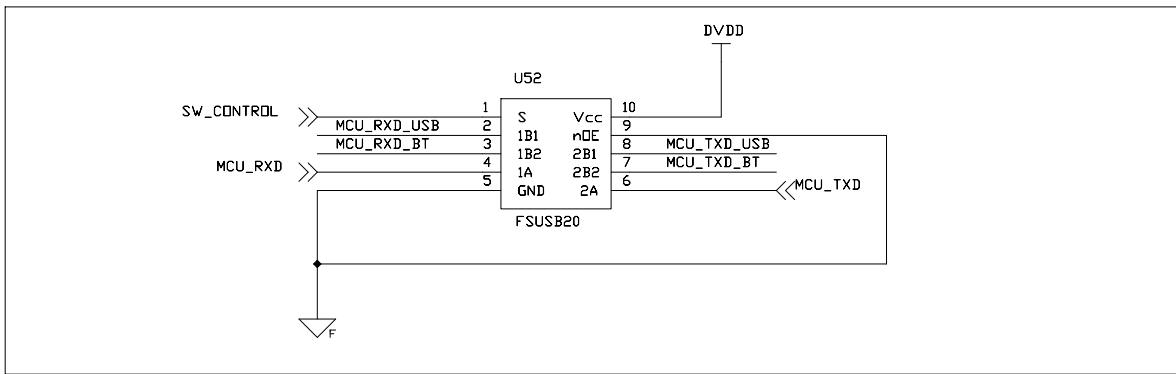
### SWITCH FOR CHARGING CONTROL



### BLUETOOTH



### PATHWAY CONTROL OF USB AND BLUETOOTH COMMUNICATION



Title		
BMI		
Size	Document Number	Rev
A4	USB_BT	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 12 of 13

1. 아날로그 설계 시, 전극과 ADS1299 사이의 거리를 최대한 짧게 하시는 것이 좋습니다.
2. NON inverting Amp의 저항은 오차가 가장 작은 저항<1% 이하>을 사용하셔야 합니다.

Title		
<Title>		
Size	Document Number	Rev
A	<Doc>	<RevCode>
Date:	Thursday, October 13, 2016	Sheet 13 of 13
	2	1