



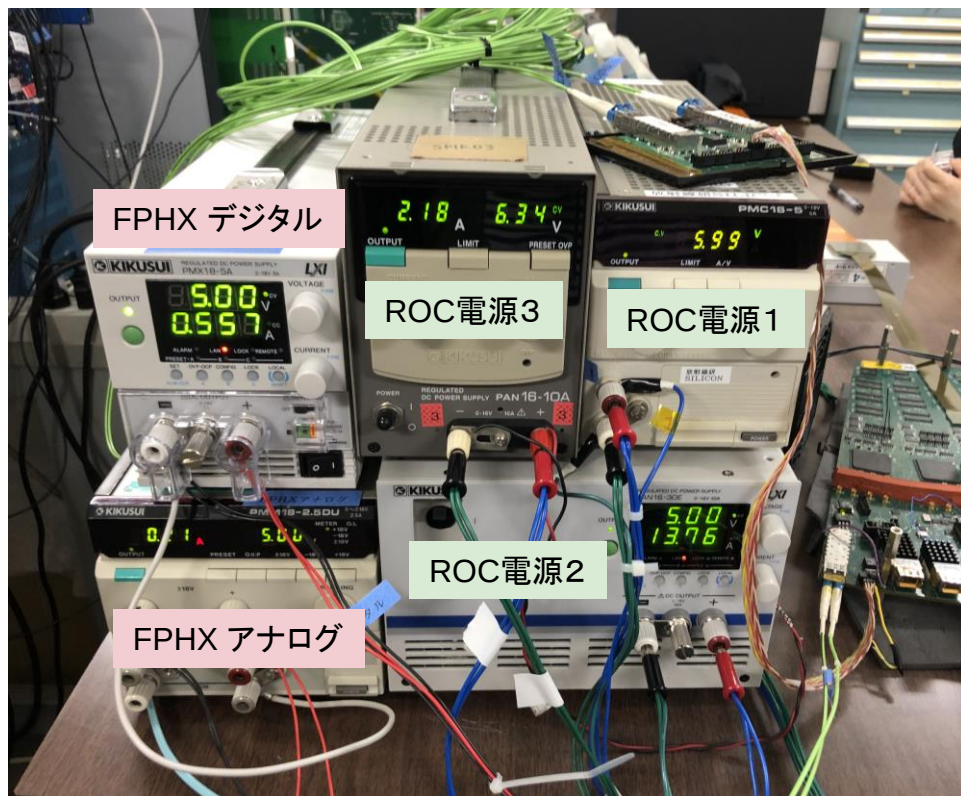
ROC レギュレータの 入出力電圧

NWU : 森田美羽、高濱瑠奈



ROCレギュレータへの電圧の供給

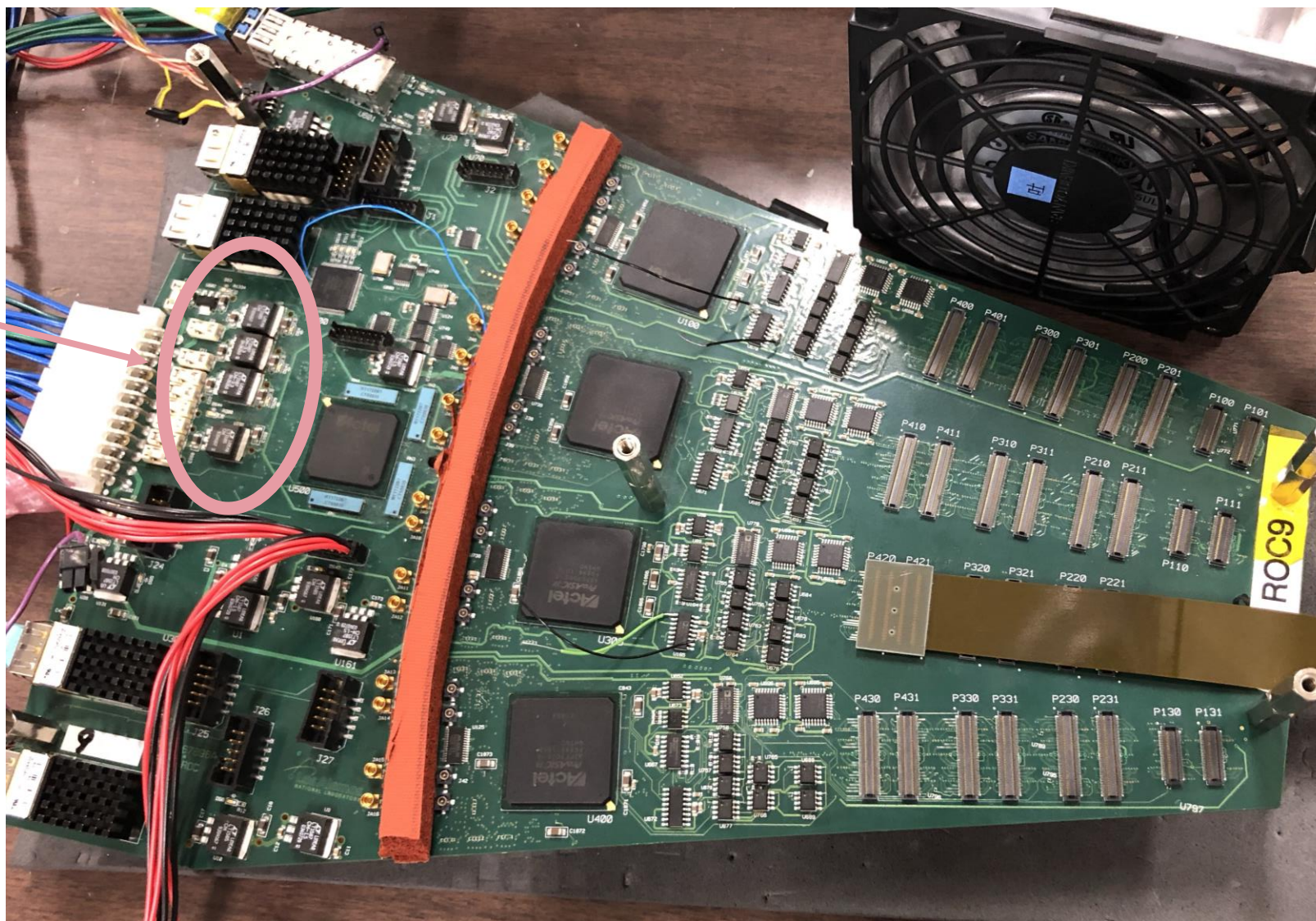
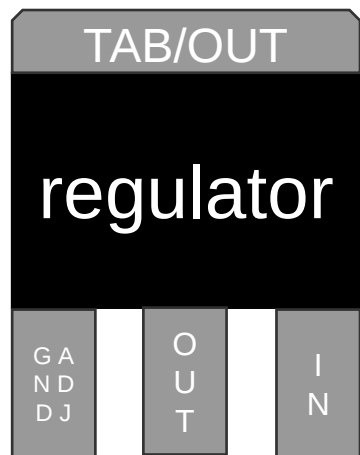
2



	23	21	19	17	15	13	11	9	7	5	3	1
GND->	24	22	20	18	16	14	12	10	8	6	4	2



レギュレータ

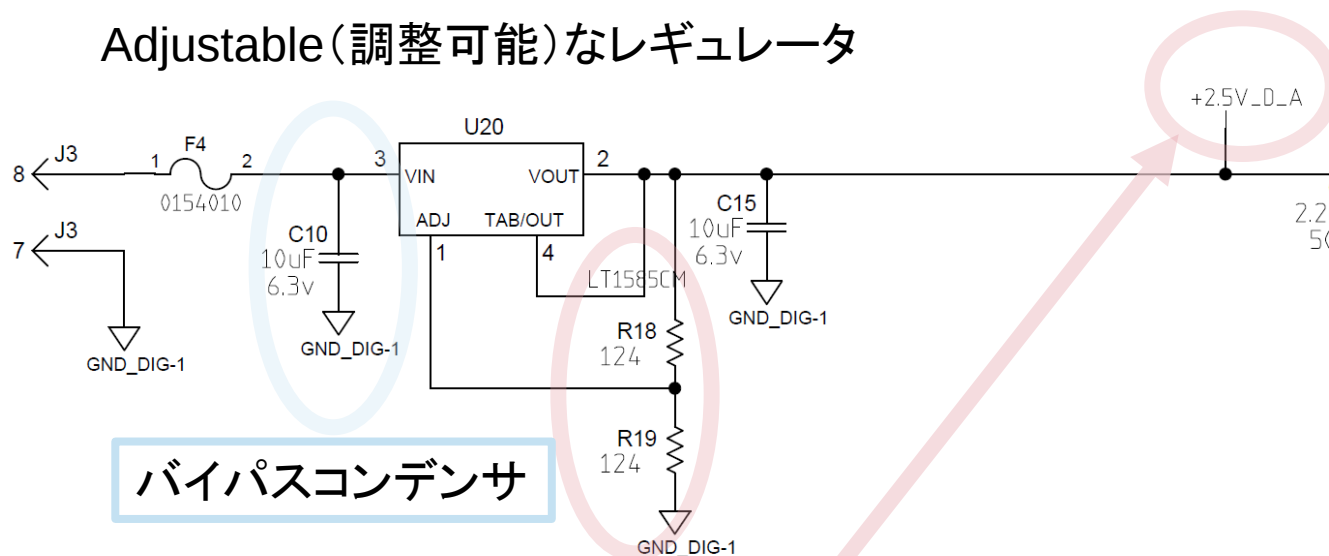




レギュレータ

4

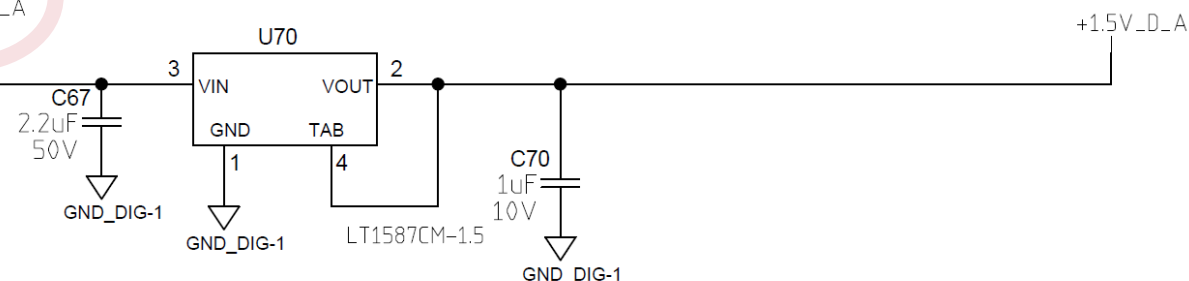
Adjustable (調整可能) なレギュレータ



バイパスコンデンサ

$$124 + 124 = 248\Omega$$
$$248\Omega \times 10\text{mA} = 2.48\text{V}(\text{約}2.5\text{V})$$

一定の電圧を供給するレギュレータ



Output Voltage

The LT1584/LT1585/LT1587 adjustable regulators develop a 1.25V reference voltage between the output pin and the adjust pin (see Figure 3). Placing a resistor R1 between these two terminals causes a constant current to flow through R1 and down through R2 to set the overall output voltage. Normally, this current is the specified minimum load current of 10mA. The current out of the adjust pin adds to the current from R1 and is typically 55μA. Its output voltage contribution is small and only needs consideration when very precise output voltage setting is required.

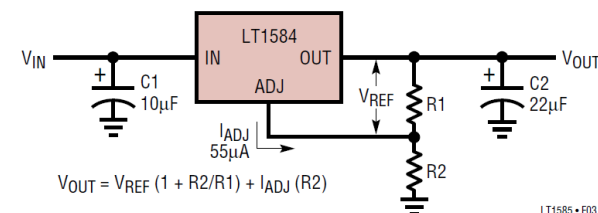


Figure 3. Basic Adjustable Regulator



対応表

5

PARAMETER		CONDITIONS
Reference Voltage	LT1584	$1.5V \leq (V_{IN} - V_{OUT}) \leq 3V, 10mA \leq I_{OUT} \leq 7A$
	LT1585	$1.5V \leq (V_{IN} - V_{OUT}) \leq 5.75V, 10mA \leq I_{OUT} \leq 4.6A, T_J \geq 25^\circ C$
		$1.5V \leq (V_{IN} - V_{OUT}) \leq 5.75V, 10mA \leq I_{OUT} \leq 4A, T_J < 25^\circ C$
	LT1587	$1.5V \leq (V_{IN} - V_{OUT}) \leq 5.75V, 10mA \leq I_{OUT} \leq 3A$

Output Voltage	LT1584-3.3	$4.75V \leq V_{IN} \leq 6.3V, 0mA \leq I_{OUT} \leq 7A$
	LT1585-3.3	$4.75V \leq V_{IN} \leq 7V, 0mA \leq I_{OUT} \leq 4.6A, T_J \geq 25^\circ C$
	LT1587-3.3	$4.75V \leq V_{IN} \leq 7V, 0mA \leq I_{OUT} \leq 3A$

Line Regulation (Note 4)	$I_L = 0mA, 4.2V \leq V_{IN} \leq 15V$ (LT1118)
	$I_L = 0mA, 4.2V \leq V_{IN} \leq 15V$ (LT1118-2.5)
	$I_L = 0mA, 4.75V \leq V_{IN} \leq 15V$ (LT1118-2.85)
	$I_L = 0mA, 6.5V \leq V_{IN} \leq 15V$ (LT1118-5)

ピン番号	ROC電源	レギュレータ		入力電圧[V]		出力電圧[V]	
				必要値	測定値	期待値	測定値
1, 2	1	U38	LT1587	6.5	5.980	5.0	4.927
3, 4	1	U131	LT1587	6.5	5.993	5.0	4.968
7, 8	2裏	U20	LT1585	4.0	4.266	2.5	2.487
9, 10	2裏	U156	LT1585	4.0	4.736	2.5	2.510
11, 12	2裏	U160	LT1585	4.0	4.367	2.5	2.504
13, 14	2裏	U10	LT1585	4.0	4.131	2.5	2.435
15, 16	3	U3	LT1585	4.0	6.105	2.5	2.500
17, 18	3	U17	LT1587-3.3	4.75	6.237	3.3	3.277
19, 20	2前	U603	LT1587-3.3	4.75	4.667	3.3	3.260
21, 22	2前	U8	LT1585	4.0	4.859	2.5	2.509
23, 24	1	U602	LT1118CST-5	6.5	5.991	5.0	4.962

Back Up



6

