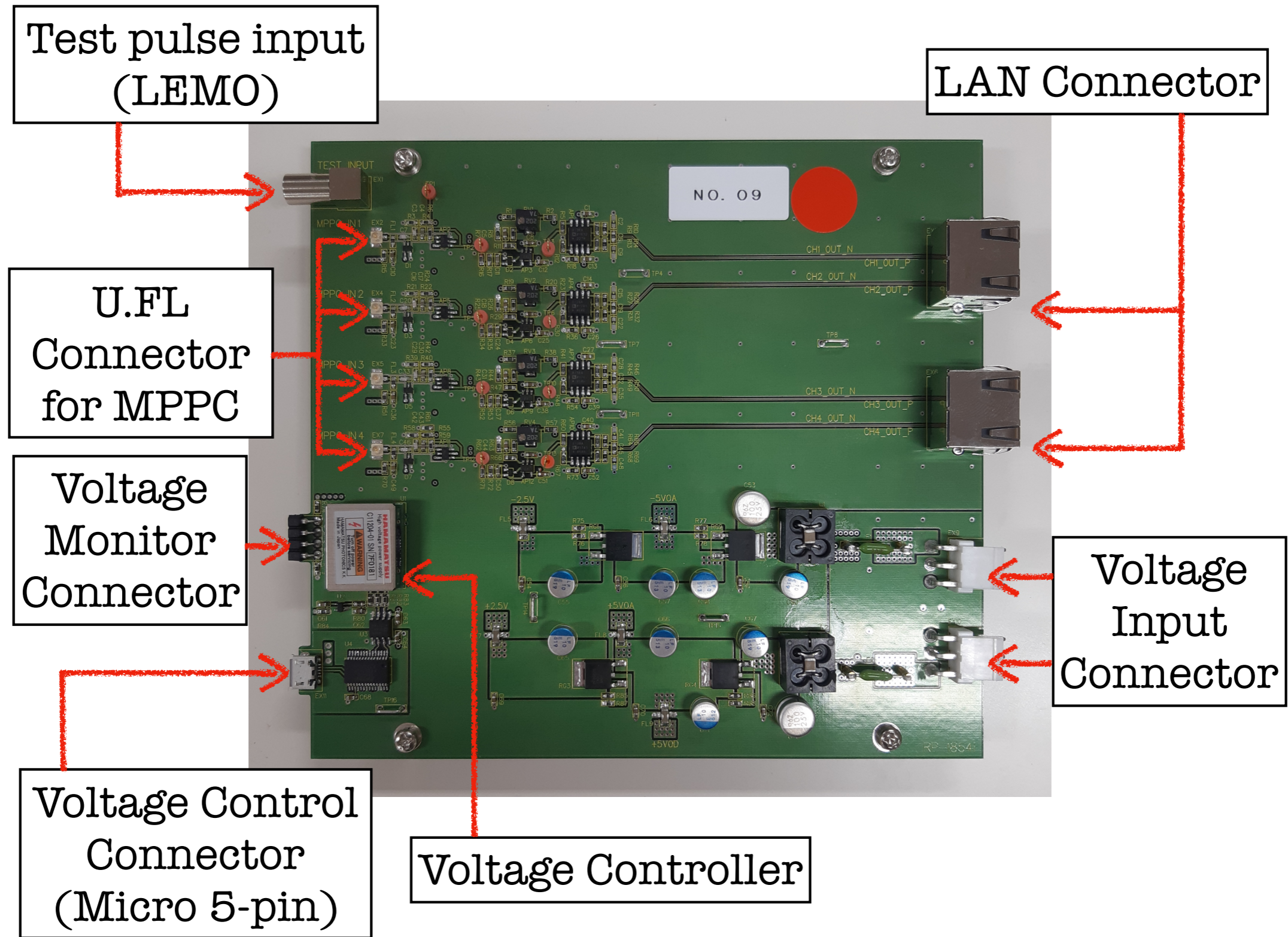


DCV Manual

5 February, 2020

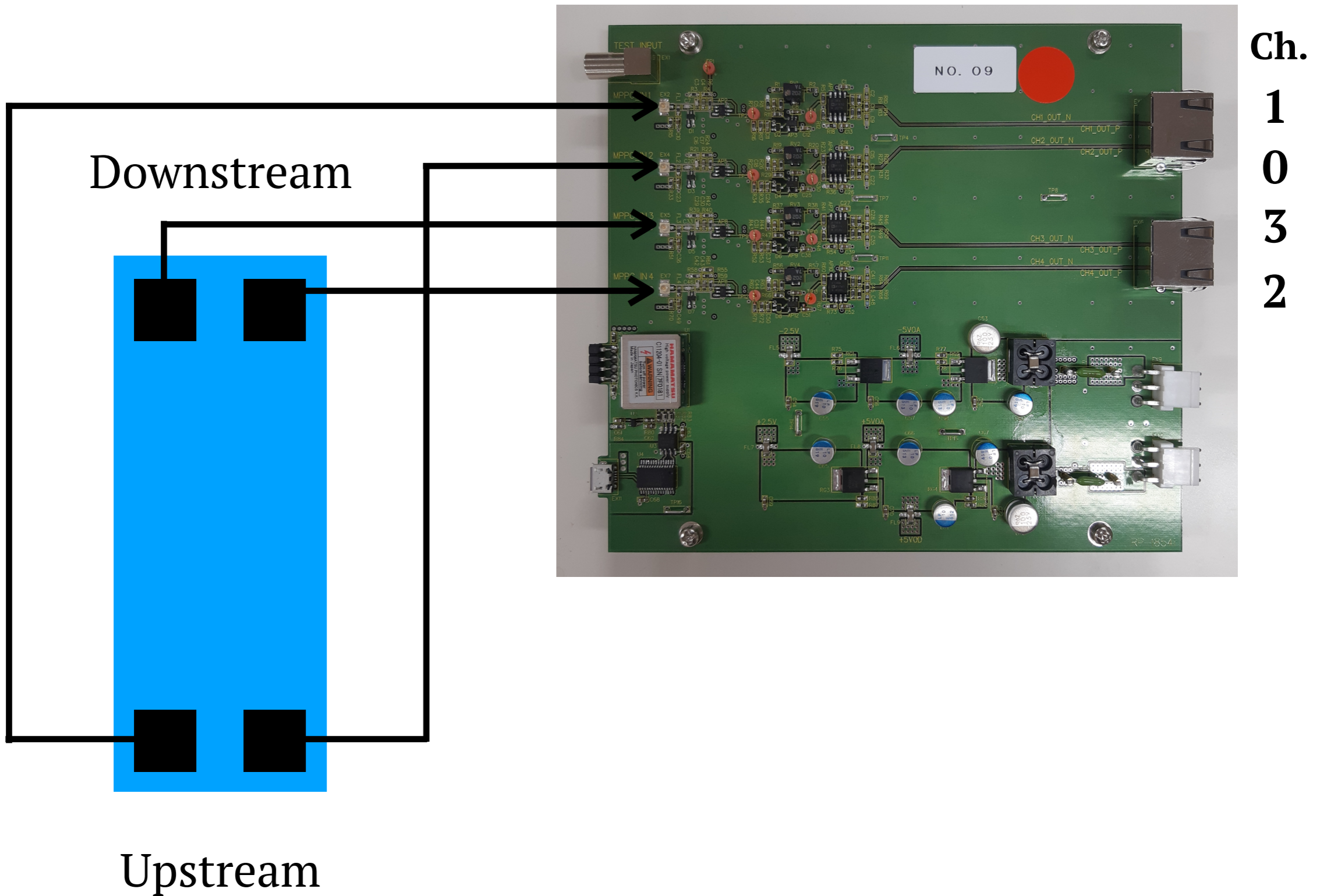
HongMin KIM

DCV Read-out Board



DCV Setup

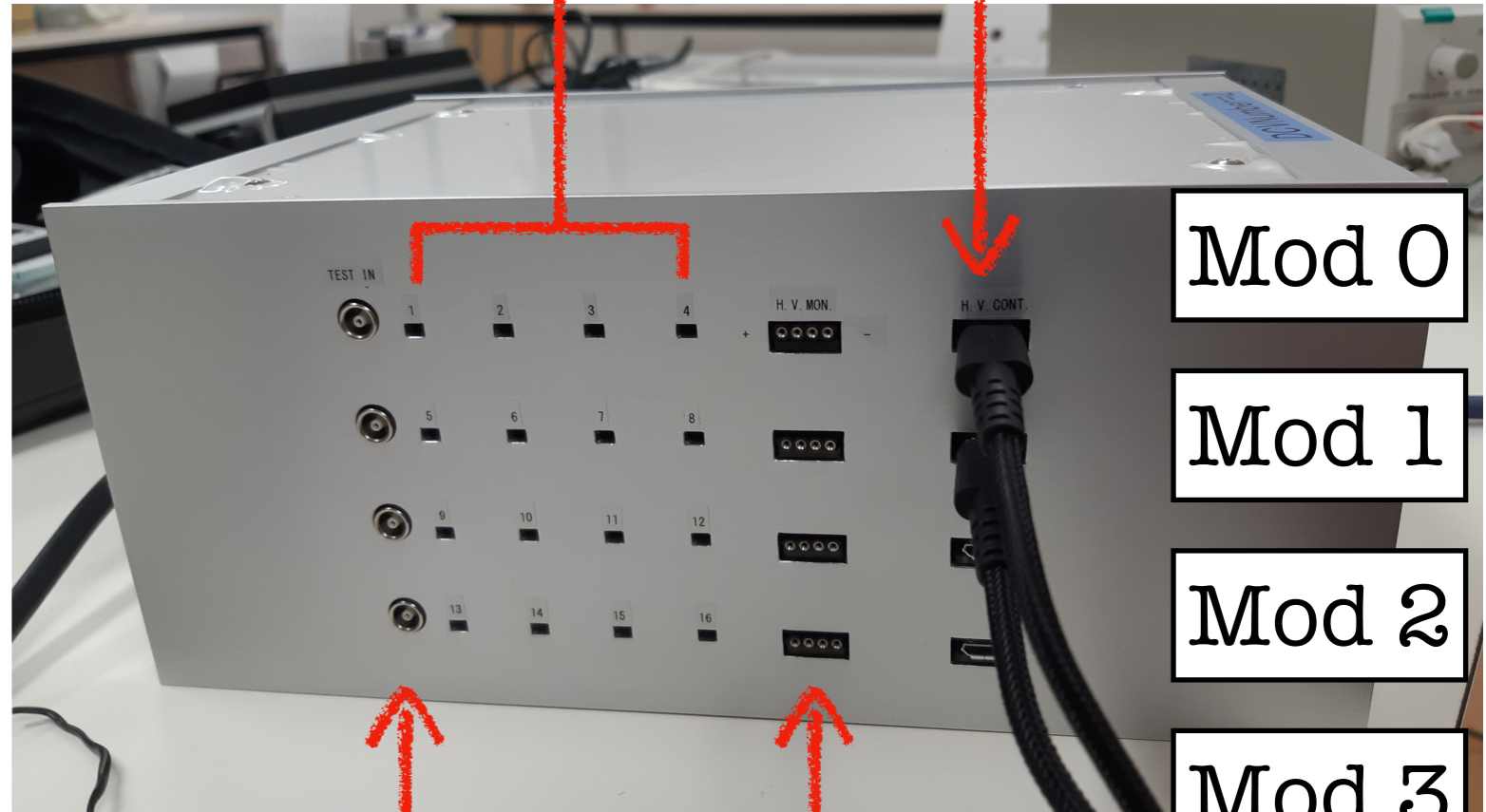
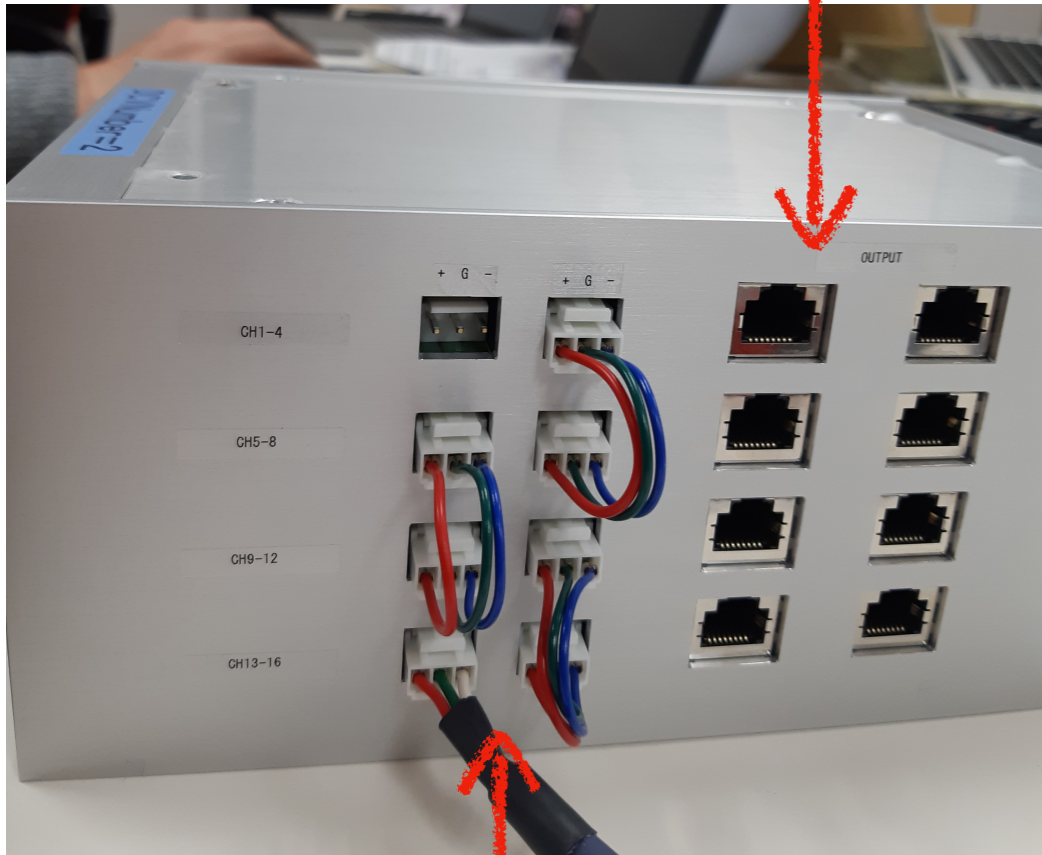
When looking at the surface to which the MPPCs are attached



LAN Connector

U.FL Connector
for MPPC

Voltage Control
Connector
(Micro 5-pin)



Voltage
Input
Connector

Test pulse input
(LEMO)

Voltage
Monitor
Connector

Mod 0

Mod 1

Mod 2

Mod 3

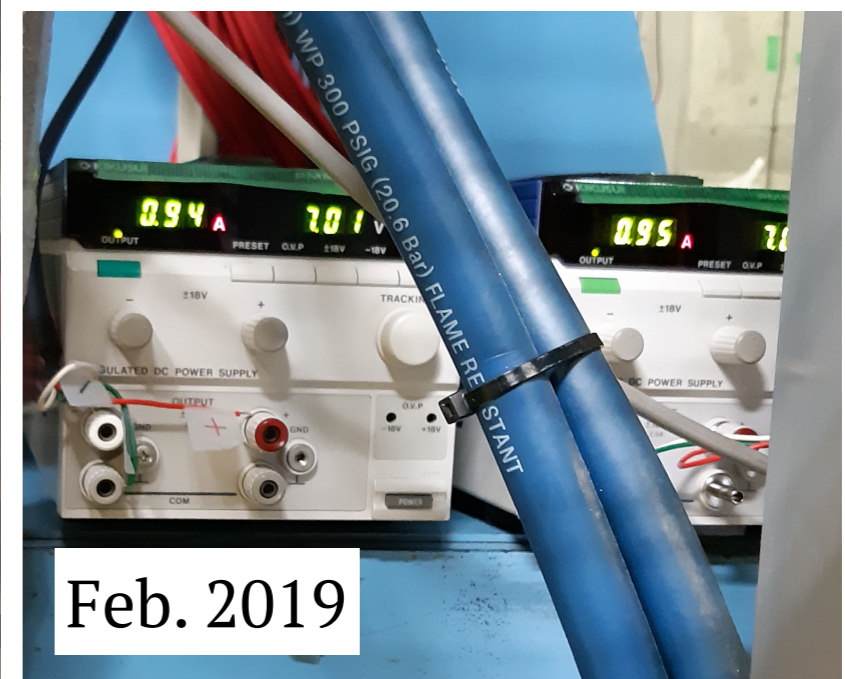
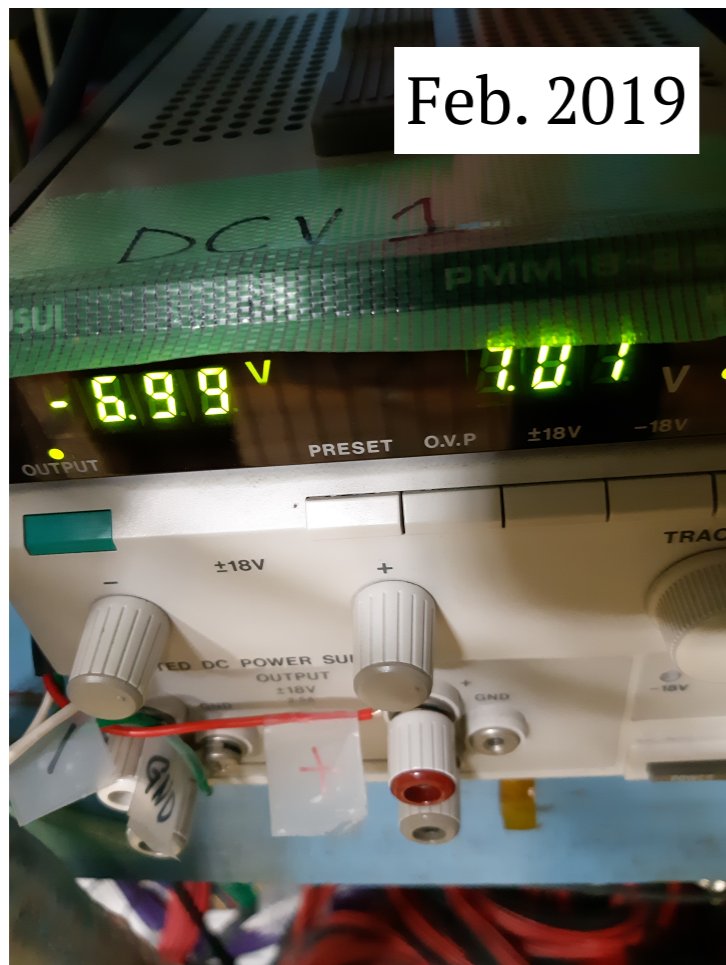
MPPC Signal Check Process

1. Turn the voltage dial of the power supply to zero point.

- To prevent sudden power supply.

2. Turn on the power supply.

- Voltage = +7.0 V, -7.0 V.



MPPC Signal Check Process

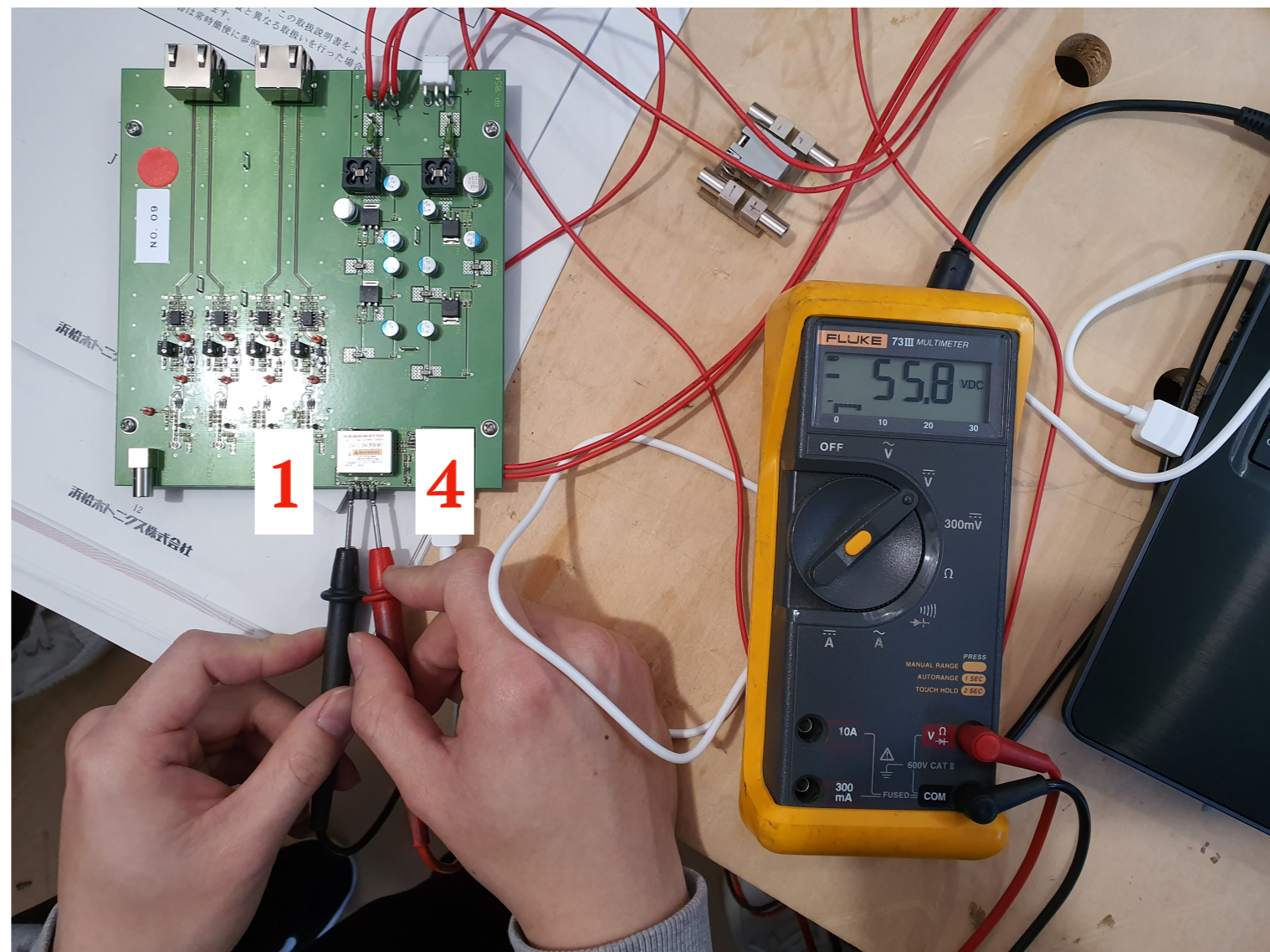
3. Check the voltage on each board via the voltage monitor connector using a multimeter.

- How can we check the read-out board of the DCV1?

Very limited space

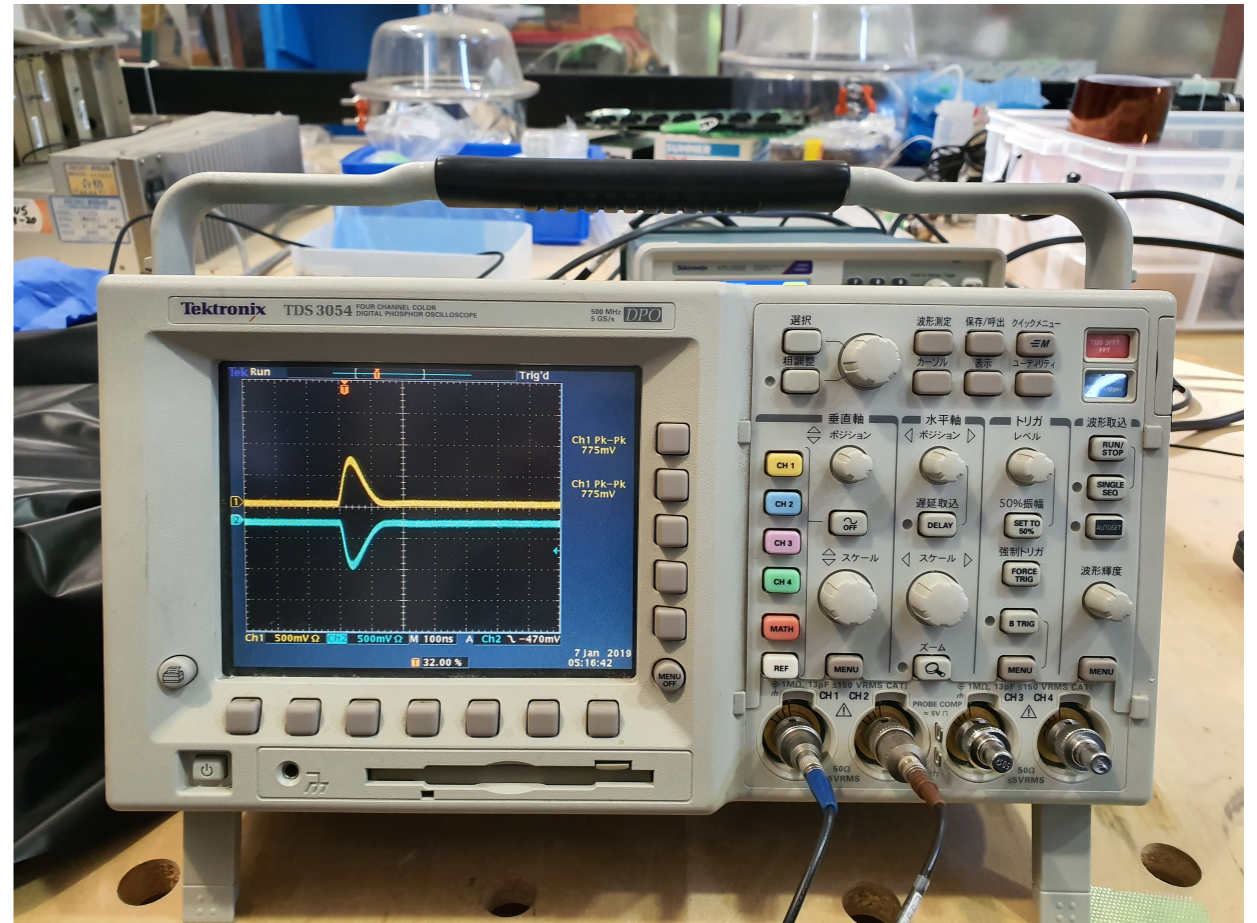
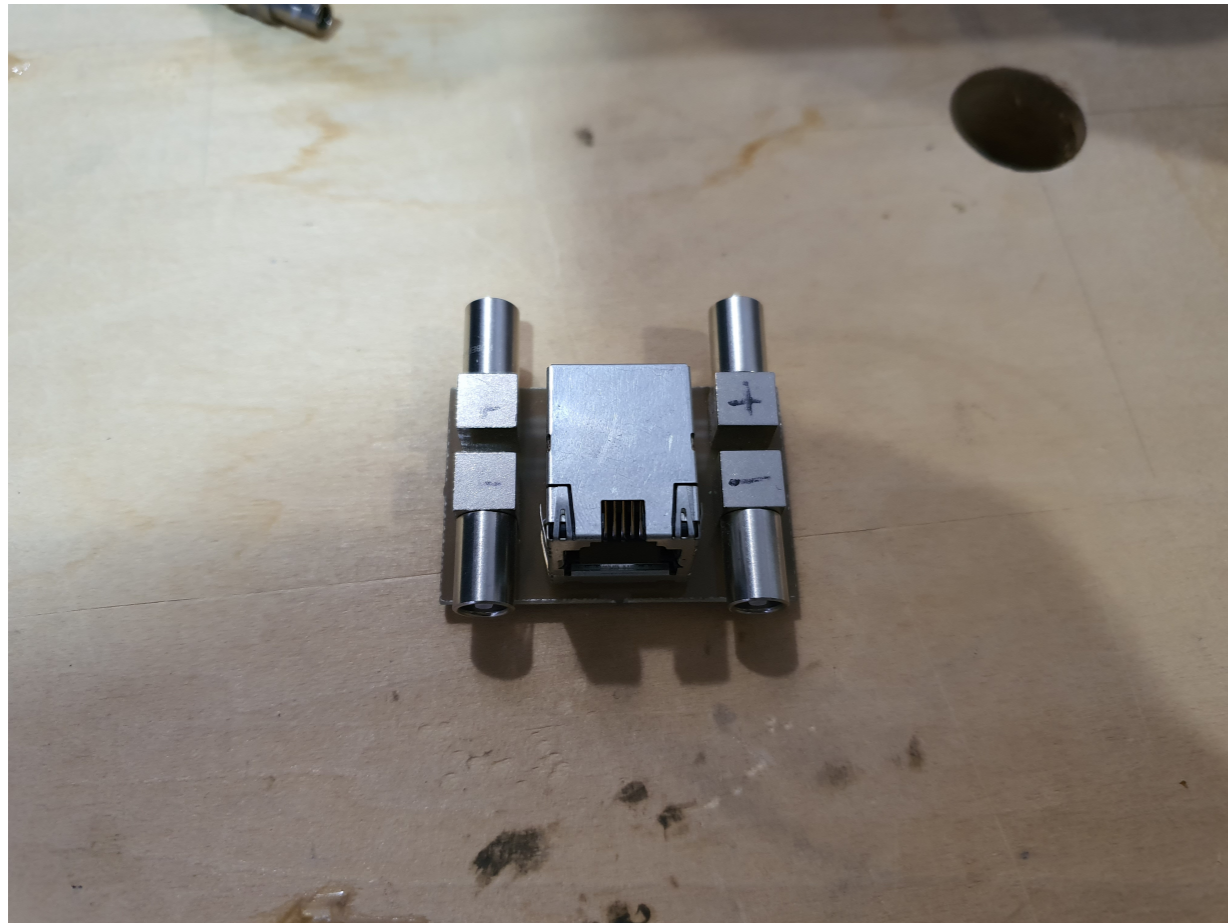


DCV1



MPPC Signal Check Process

4. Check the MPPC signal.



Comparison of MPPC signal by read-out board

LED Signal Properties

Frequency

Amplitude

Width[ns]

Power Supply	Tera term [V]	Voltage monitor [V]	Board 1		Board 2	
			Pulse height[mV]	Width[ns]	Pulse height[mV]	Width[ns]
54 V						
55 V						
56 V						
57 V						
58 V						