----- Theory of Operation -----

Operation Explanation

Main Control Unit

The main control unit is composed of the CPU (IC101), RAM(IC103) and also ROM(IC102).
CPU is an exclusive use chip for communication control unit (Communication Processor) that consisted of 32 bit processor, IC211, X211 and an oscillator to provide 66MHz as clock signal.
The ROM is a Flash-Memory included 16 bit data bus width that depends on user setting it saves the data and also it corresponds to the version up of the farm wear.
The RAM is using SDRAM with 16 bit data bus width .

Wireless LAN Control Unit

The communication done via controlling the RF unit with the CPU.
The interface is PCMCIA conformed and the control signal is generated with IC104 (Gate Array).

Power Supply Unit

DC12V that was input from the power supply connector (J901) is entered to the power supply circuit through the poly-switch (S901).
The poly-switch included an over-current protection element so it is not operate in the passage current at the time of the overload and as it is a self return nature switch, it has different characteristic of the fuse.
The power supply circuit, consisted of switching regulator controller (IC901) at the center.
The IC901 is an integrated circuit for the switching power supply and it is included the reference voltage circuit, oscillation circuit, comparative circuit to provide 5.0V.
To make a 3.3V it considered 5.0V as a reference and provided 3.3V via R971 and R972.