

The schematic diagram illustrates a buck converter circuit. The input voltage V_{IN} is connected to the gate of MOSFET Q1 (IAUCN10S7L040) through a series of capacitors C1 (GRM55ER72A475KA01), C2 (GRM55ER72A475KA01), and C3 (MAL213639479E3). The drain of Q1 is connected to the inductor L1 (SRP1038WA-4R7M) and the gate of MOSFET Q2 (IAUCN10S7L040). The source of Q2 is connected to the inductor L1 and the gate of Q1. The output of the inductor L1 is connected to the output voltage V_{OUT} through capacitors C4 (GRM21BR61C226ME44K) and C5 (GRM21BR61C226ME44K). The ground connection is labeled GND.

The schematic diagram illustrates the pin connections for the LPC1114 microcontroller. The chip is represented by a central rectangle with pins numbered 1 through 33. The connections are as follows:

- ADC Connections (Pins 17-24):**
 - Pin 17: ADC_IN
 - Pin 18: HI
 - Pin 19: LI
 - Pin 20: R/PIO0_11/AD0/CT32B0_MAT3
 - Pin 21: R/PIO0_10/AD1/CT32B1_CAP0
 - Pin 22: R/PIO1_1/AD2/CT32B1_MAT0
 - Pin 23: R/PIO1_2/AD3/CT32B1_MAT1
 - Pin 24: R/PIO1_3/AD4/CT32B1_MAT2
- I2C Connections (Pins 9-16):**
 - Pin 9: SDA
 - Pin 10: SCL
 - Pin 11: PIO0_4/SCL
 - Pin 12: PIO0_5/SDA
 - Pin 13: PIO0_6/SCK0
 - Pin 14: PIO0_7/CTS
 - Pin 15: PIO0_8/MISO0/CT16B0_MAT0
 - Pin 16: PIO0_9/MOSI0/CT16B0_MAT1/SW0
- Power and Reset Connections (Pins 1, 2, 3, 4, 5, 6, 7, 8, 31, 32, 33):**
 - Pin 1: RESET
 - Pin 2: RESET/PIO0_0
 - Pin 3: XTALIN
 - Pin 4: XTALOUT
 - Pin 5: VDD_1
 - Pin 6: PIO1_8/CT16B1_CAP0
 - Pin 7: PIO0_2/SSEL0/CT16B0_CAP0
 - Pin 8: 3.3V
 - Pin 31: 3.3V
 - Pin 32: GND
 - Pin 33: GND
- Other Connections (Pins 25-30):**
 - Pin 25: WAKEUP
 - Pin 26: SWDIO/PIO1_3/AD4/CT32B1_MAT2
 - Pin 27: PIO1_4/AD5/CT32B1_MAT3/WAKEUP
 - Pin 28: PIO1_11/AD7
 - Pin 29: VDD_2
 - Pin 30: PIO1_5/RTS/CT32B0_CAP0

The diagram also shows the placement of external components: a 10k resistor (R10) connected between pins 8 and 7, a 0.1uF capacitor (C22) connected between pins 5 and 4, a 10k resistor (R11) connected between pins 25 and 26, and a 0.1uF capacitor (C23) connected between pins 31 and 32.

The top diagram shows the KSC721J-LFS module connected to a 3.3V supply and a switch S1. The module has pins 1, 2, 3, and 4. Pin 1 is connected to 3.3V, pin 2 to GND, pin 3 to S1, and pin 4 to a 10k resistor R6 connected to 3.3V. The output is labeled RESET.

The bottom diagram shows the KSC253J-SP_DELTA_LFG module connected to a 3.3V supply and a switch S2. The module has pins 1, 2, 3, and 4. Pin 1 is connected to 3.3V, pin 2 to GND, pin 3 to S2, and pin 4 to a 10k resistor R5 connected to 3.3V. The output is labeled WAKEUP.