

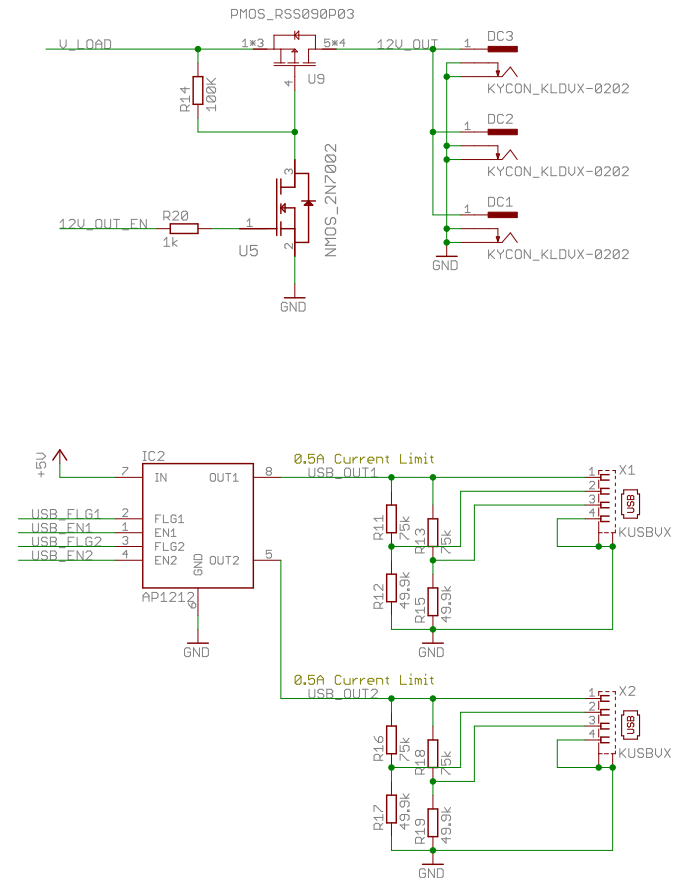
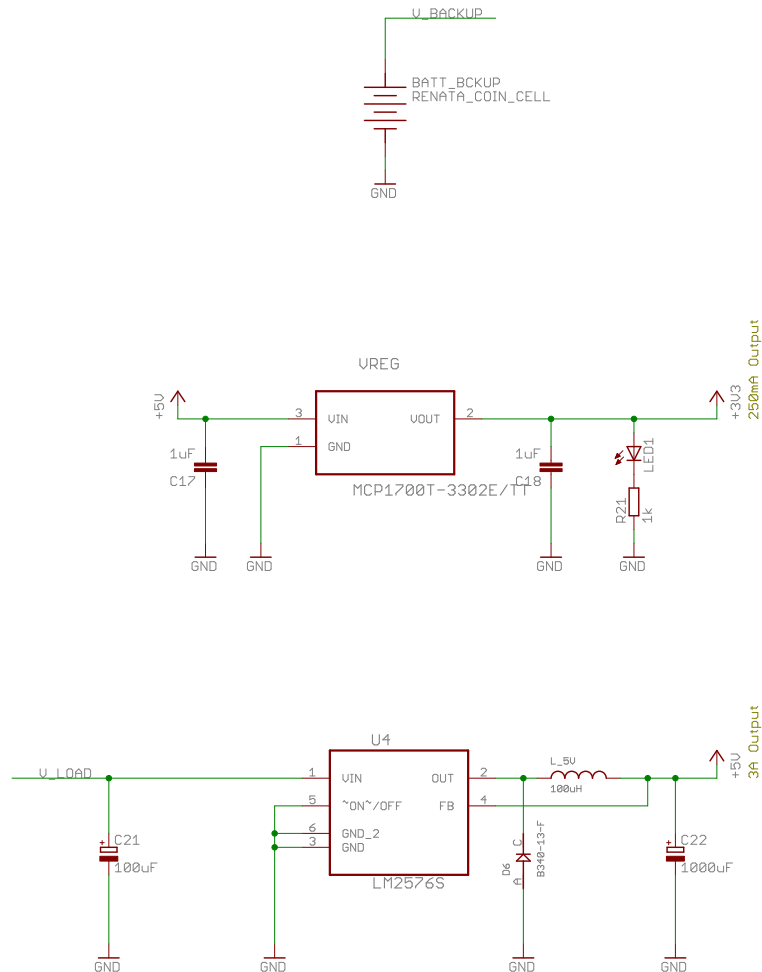
Control Circuitry

The diagram illustrates the control circuitry for a system, centered around the **STM32F050C6T6A** microcontroller (IC1). The circuit includes the following components and connections:

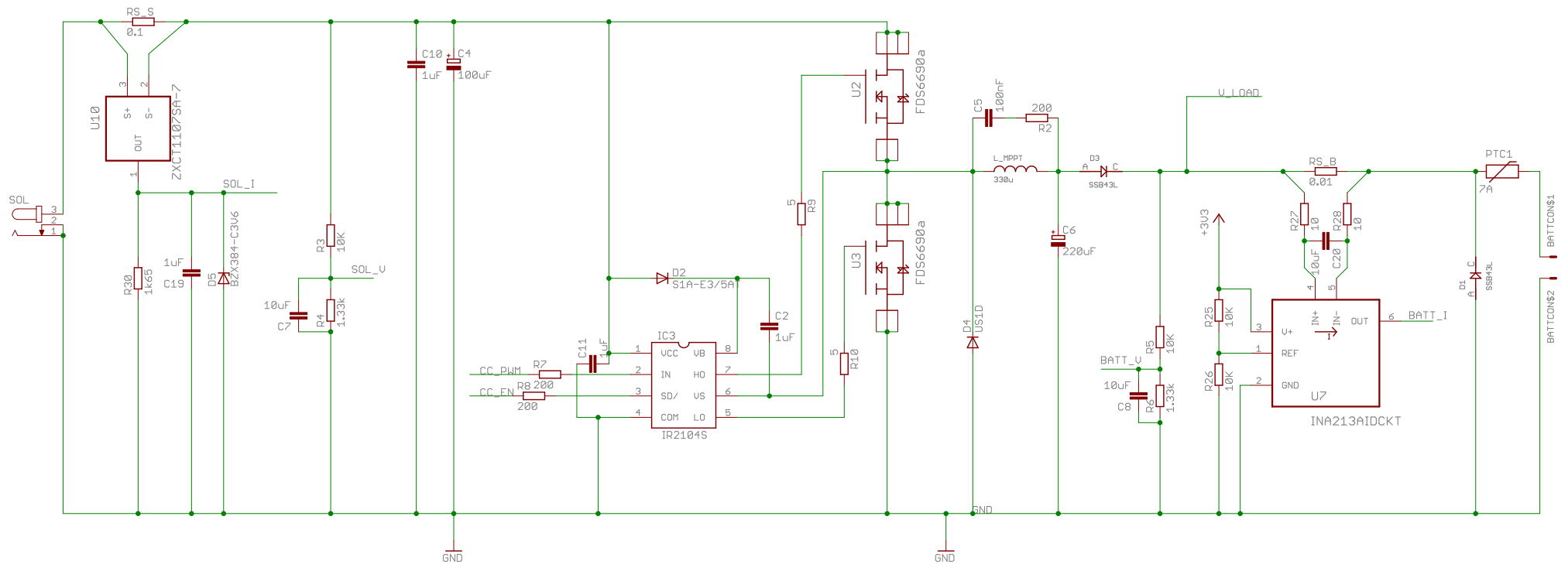
- Power Management:**
 - 3.3V Regulator (U8):** A 120mA Max regulator providing +3V3 to the microcontroller's VDD, VSS, and other pins. It includes a 100nF capacitor (C12) and a 100nF capacitor (C13).
 - 12V Regulator (U6):** A 12V OUT_FN regulator providing +5V to the LCD display and other components. It includes a 100nF capacitor (C14) and a 100nF capacitor (C15).
 - Capacitors:** C1 (12.5pF), C3 (100nF), C9 (12.5pF), C12 (100nF), C13 (100nF), C14 (100nF), C15 (100nF), C16 (100nF).
- Microcontroller (IC1):**
 - Pin Connections:**
 - Power/Ground:** VDD, VSS, GND, NRST, UDD, USS, PA0, PA1, PA2, PA3, PA4, PA5, PA6, PA7, PA8, PA9, PA10, PA11, PA12, PA13, PA14, PA15, PA16, PA17, PA18, PA19, PA20, PA21, PA22, PA23, PA24, PA25, PA26, PA27, PA28, PA29, PA30, PA31, PA32, PA33, PA34, PA35, PA36, PA37, PA38, PA39, PA40, PA41, PA42, PA43, PA44, PA45, PA46, PA47, PA48, PA49, PA50, PA51, PA52, PA53, PA54, PA55, PA56, PA57, PA58, PA59, PA60, PA61, PA62, PA63, PA64, PA65, PA66, PA67, PA68, PA69, PA70, PA71, PA72, PA73, PA74, PA75, PA76, PA77, PA78, PA79, PA80, PA81, PA82, PA83, PA84, PA85, PA86, PA87, PA88, PA89, PA90, PA91, PA92, PA93, PA94, PA95, PA96, PA97, PA98, PA99, PA100, PA101, PA102, PA103, PA104, PA105, PA106, PA107, PA108, PA109, PA110, PA111, PA112, PA113, PA114, PA115, PA116, PA117, PA118, PA119, PA120, PA121, PA122, PA123, PA124, PA125, PA126, PA127, PA128, PA129, PA130, PA131, PA132, PA133, PA134, PA135, PA136, PA137, PA138, PA139, PA140, PA141, PA142, PA143, PA144, PA145, PA146, PA147, PA148, PA149, PA150, 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PA723, PA724, PA725, PA726, PA727,

Power Conversions

User Outputs



Charge Controller



Ashley Grealish	
standalone	
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A	<div>NOTES</div> <div>TODO:<ul style="list-style-type: none">- Contrast Adjust Pot needs changing- Swap MOS with BJT</div>								A
B									B
C									C
D									D
E									E
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		Ashley Grealish	
		standalone	
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