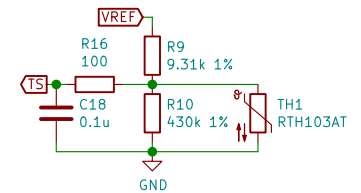
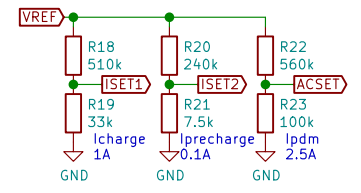
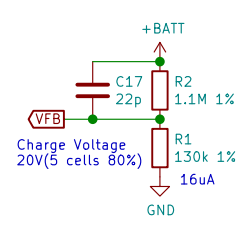
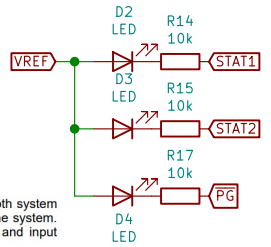
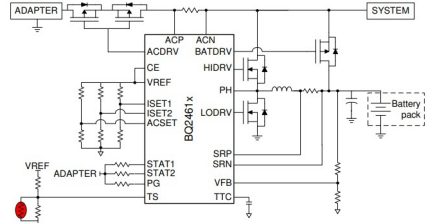
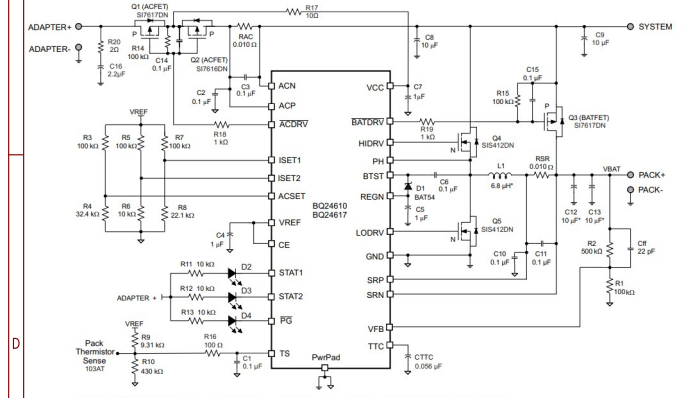


概略回路図



10.2.1 System with Power Path
BQ24610 can be configured for Power Path applications, where input source can be used to power both system as well as charge the battery. If input source is removed, then battery is automatically connected to the system. Figure 20 shows typical schematic when using BQ24610 with Power Path, input current regulation and input reverse protection FET.



$V_{bat} = 2.1[V] \times (1 + R_{batt}/R_{gnd})$
 $20.0[V] = 2.1 \times (1 + R_{batt}/R_{gnd})$
 $(1 + R_{batt}/R_{gnd}) = 9.524$
 $R_{batt}/R_{gnd} = 8.524$
 $R_{batt} : R_{gnd} = 8.524 : 1$
 $R_{batt} = 1.1M\Omega, R_{gnd} = 130k\Omega$
 $R_{batt} = 330k\Omega, R_{gnd} = 39k\Omega$
 $R_{batt} = 430k\Omega, R_{gnd} = 51k\Omega$

$I_{charge} = V_{iset1} / (20 \times R_{sr})$
 $1[A] = V_{iset1} / (20 \times 0.01[\Omega])$
 $V_{iset1} = 0.2[V]$
 $V_{REF} = 3.3[V]$
 $R_{hi} = 510k[\Omega], R_{low} = 33k[\Omega]$
 $R_{hi} = 560k[\Omega], R_{low} = 36k[\Omega]$
 $R_{hi} = 200k[\Omega], R_{low} = 13k[\Omega]$

$I_{precharge} = V_{iset2} / (100 \times R_{sr})$
 $0.1[A] = V_{iset2} / (100 \times 0.01[\Omega])$
 $V_{iset2} = 0.1[V]$
 $V_{REF} = 3.3[V]$
 $R_{hi} = 240k[\Omega], R_{low} = 7.5k[\Omega]$
 $R_{hi} = 560k[\Omega], R_{low} = 100k[\Omega]$

$I_{pd} = V_{acset} / (20 \times R_{ac})$
 $2.5[A] = V_{acset} / (20 \times 0.01[\Omega])$
 $V_{acset} = 0.5[V]$
 $V_{REF} = 3.3[V]$
 $R_{hi} = 560k[\Omega]$
 $R_{low} = 100k[\Omega]$

Figure 20. System Schematic with Power Path



Noriaki Nakagawa		
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