

Priority:  
Source 1 > Source 2 > Source 3

Note: When interchanging sources, no cross conduction or reverse flow. Interchanging of sources should be such that it should not interrupt running of device(<10uS)

Source1  
Ac-DC(SMPS)=  
30V(10A)

Instant-ON

Charging  
circuit  
(Li-ion  
7-cell in  
series)

Source2  
Bat 1 =  
21V(min)-  
29.5V(max)  
(3500mA, 7-cell  
in series)

Source3  
Bat 2 =  
21V(min)  
29.5V(max)  
(3500mA, 7-cell  
in series)

Buck-Boost  
converter  
Vout= 24V

Load:  
DC-DC  
converters,  
etc...

Note: Load  
draws up  
to 6A of  
current

Note: Charging for both batteries can be simultaneous / one after the other.

Based on load current consumption, about 3.5A can be allotted to charging without interrupting device's operation