

XTD MODULE

Instrumentation Development Lab
(IDLab)

University of Hawaii at Manoa

Specification

- ▣ Controller
 - Raspberry pi
 - ▣ Load bunch counter
 - ▣ Select RF clock output
 - ▣ Reset bunch count from front panel

- ▣ Package size
 - Double-Wide NIM Module

- ▣ Power Supply
 - AC - DC power Brick
 - NIM +6V

Specification

Inputs	Outputs
<p>RF clock (508.9MHz)</p> <ul style="list-style-type: none">• Reference clock signal from SuperKEKB <p>Revolution marker (100KHz)</p> <ul style="list-style-type: none">• Used to synchronize RF clock• Used to reset bunch counter <p>Bunch marker (A&B)</p> <ul style="list-style-type: none">• Used for trigger offset• 5280 bunch counts	<p>RF clock (508.9Mhz or 127MHz)</p> <ul style="list-style-type: none">• 1:1 or divide by 4 output option• Internal oscillator for independent operation• 2 channel (RJ-45 & SFP fiber optic)• Synchronized with revolution marker <p>Revolution marker (100KHz)</p> <ul style="list-style-type: none">• 2 channel (RJ-45 & SFP fiber optic) <p>Bunch marker (A&B)</p> <ul style="list-style-type: none">• 2 channel each (RJ-45 or NIM/TTL)• Strokes at desired bunch number

Block Diagram

