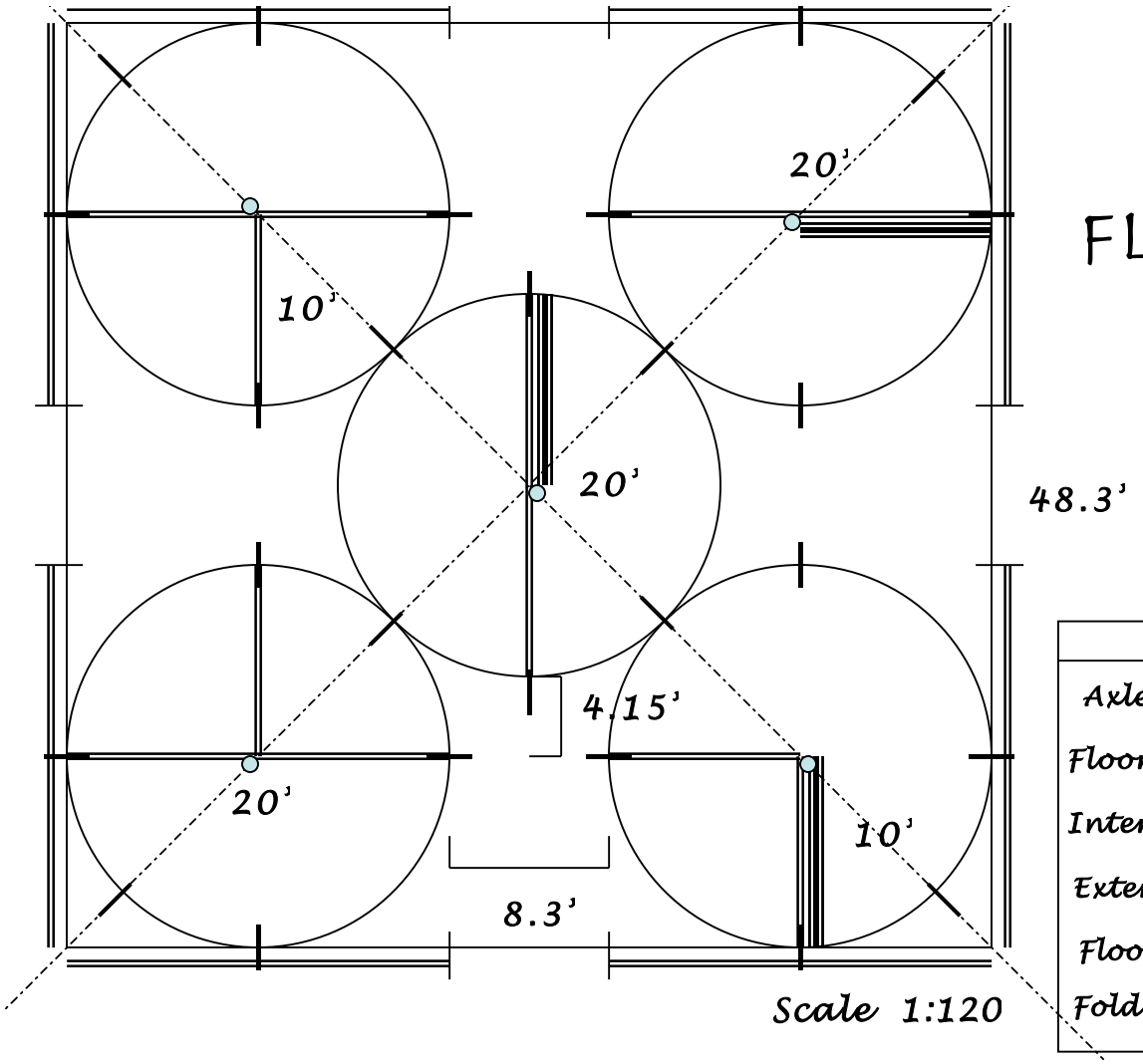
FLOOR DIALS



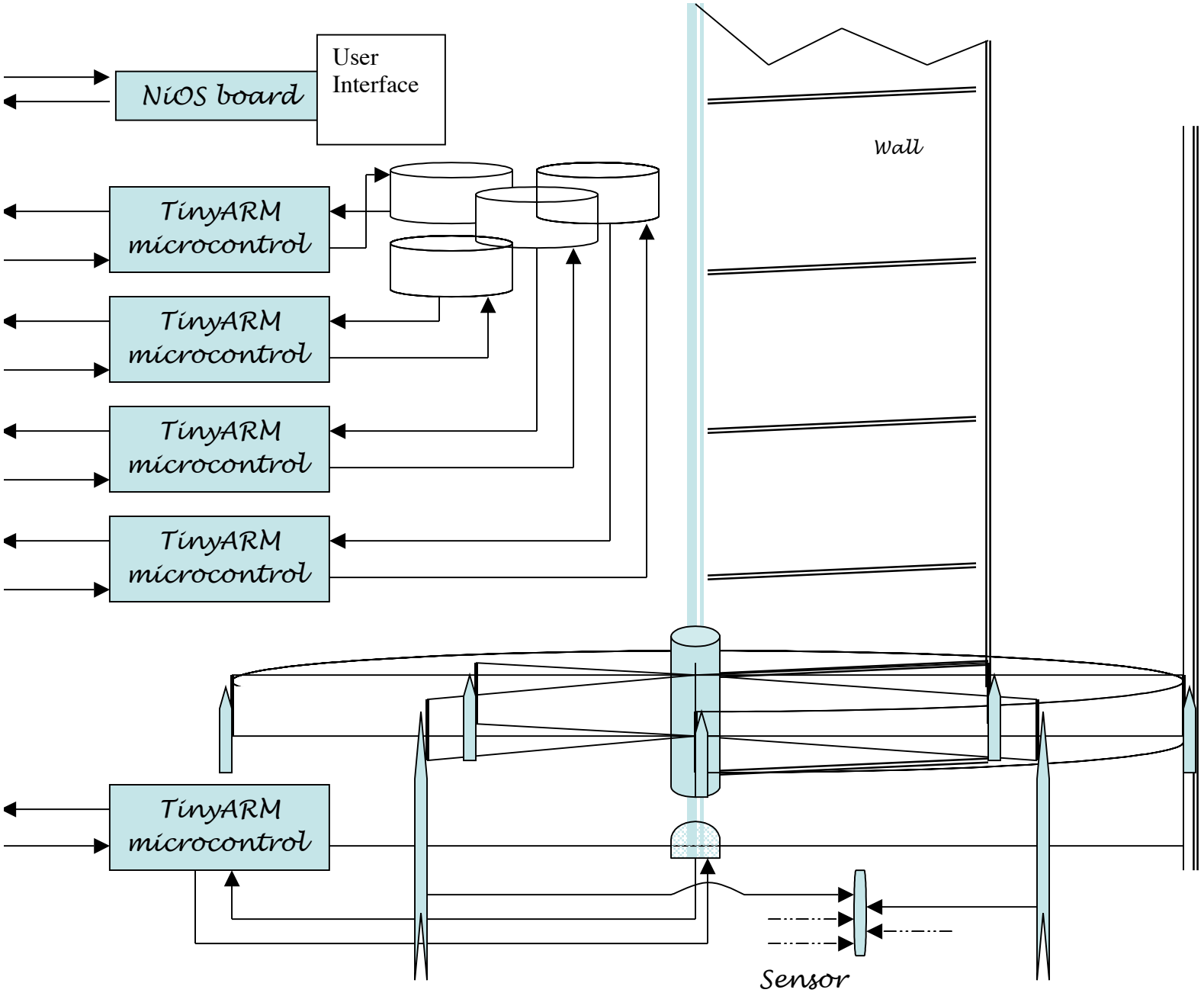
Floor Dials

This concept strives for autonomous housing, where your structure provides flexibility to fit your current lifestyle. With the rising world population and the need to conserve natural resources, it is our duty to strive for a plan that can adapt for our comfort when faced with a limited floor area.

This floor dial plan consists of a large area squared, with a floor structure built upon a horizontal frame with five inset rotaries. These rotaries are floor surfaces, and each floor surface is fixed around an axle and six floor latches. Each floor rotary (floor dial) supports three internal wall structures that pivot around the axle and secure at one of the six floor latches, which are located around the dial at multiple increments of 45 degrees.

The floor dials serve to control floor traffic, divide floor space, and create new floor plans.

Anya.Castillo@gmail.com



Cross-section of a Floor Dial system

The microcontroller uses signals from the floor latches to determine the position of the three supported walls around the middle axle. In return, the microcontroller may rotate a supporting wall structure to the desired location.

The whole floor dial system is a globally asynchronous locally synchronous system (GALS) where each of the five microcontrollers (for each floor rotary) is controlled through a NIOS development board. There will be customized hardware, a local server, a remote user interface available via the network, and other processors to determine the floor plan best suiting the occasion.

Anya.Castillo@gmail.com