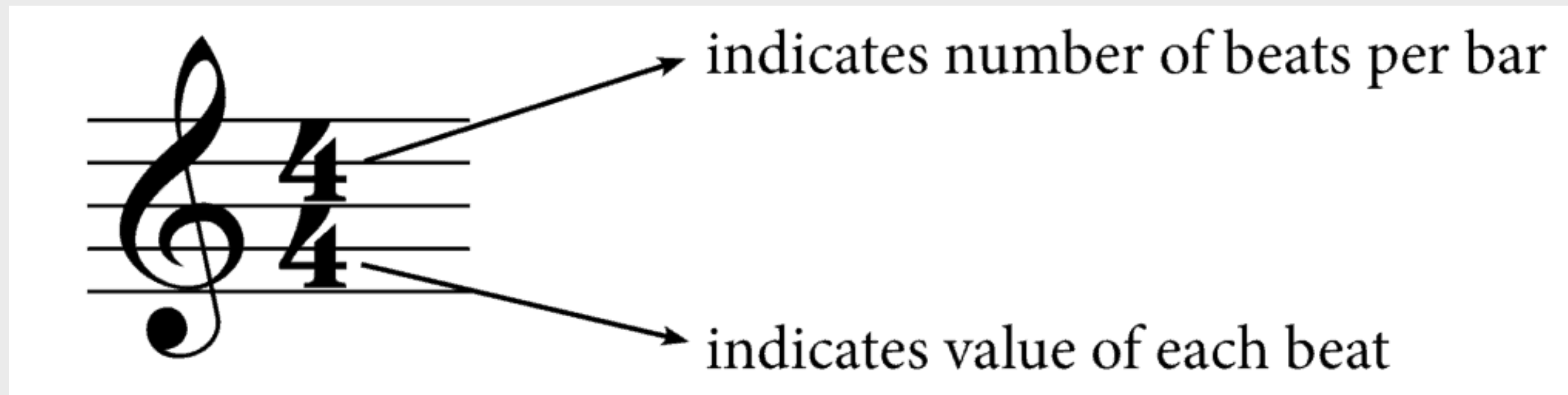


PROJECT DEMO

Using a Hobby Servo to Implement a Metronome

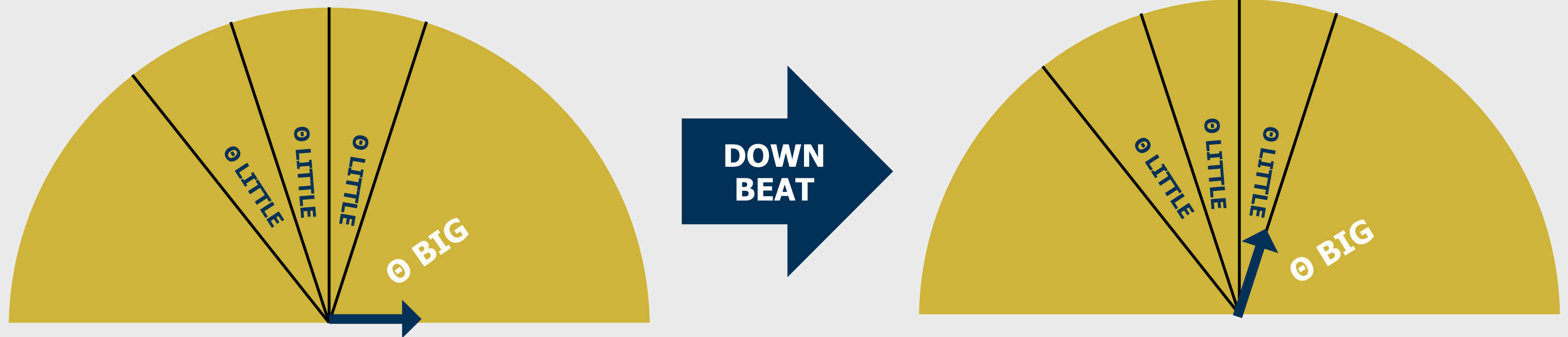
Tania Binu, Ishaan Ganguly, Rachel Ha,
Anjali Iyer, Shiva Subramanian

METRONOME MODE



4/4 BEAT EXAMPLE

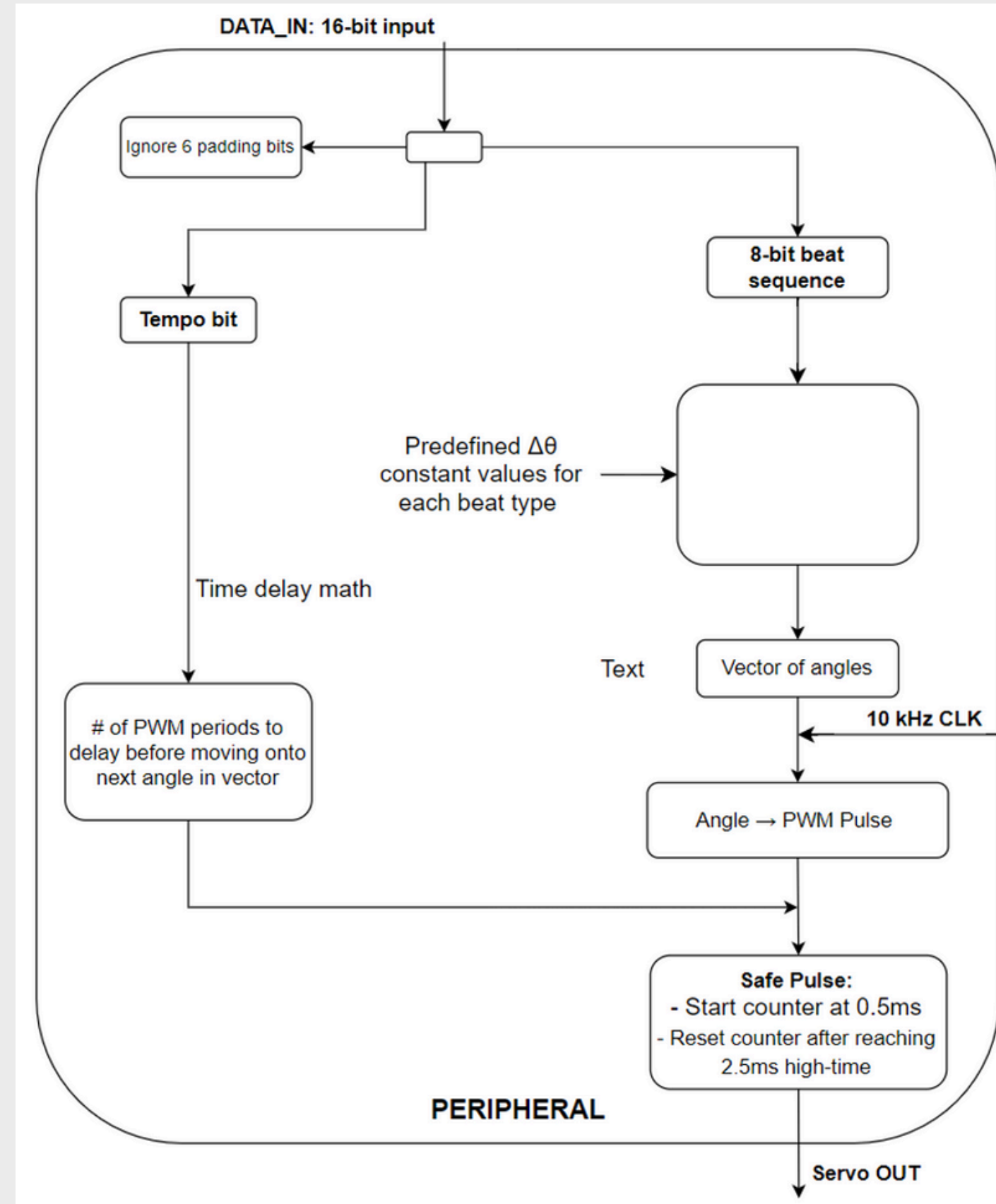
MOVEMENT = BEAT
DELAY BETWEEN MOVEMENT = TEMPO



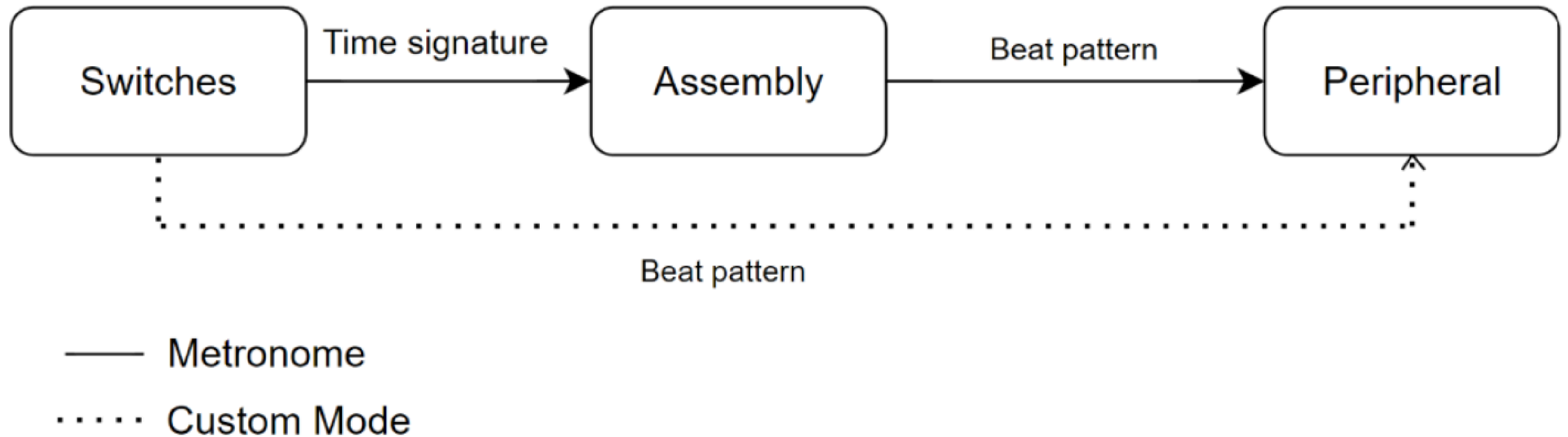
DEMO

- On/Off Conditions
- Regular/Fast Tempo
- Switch between time signatures (valid and invalid)

PERIPHERAL FLOW DIAGRAM



ASSEMBLY FUNCTIONALITY



CUSTOM BEAT MODE



“00”, “01” - Rest/no movement

“10” - Beat/small movement

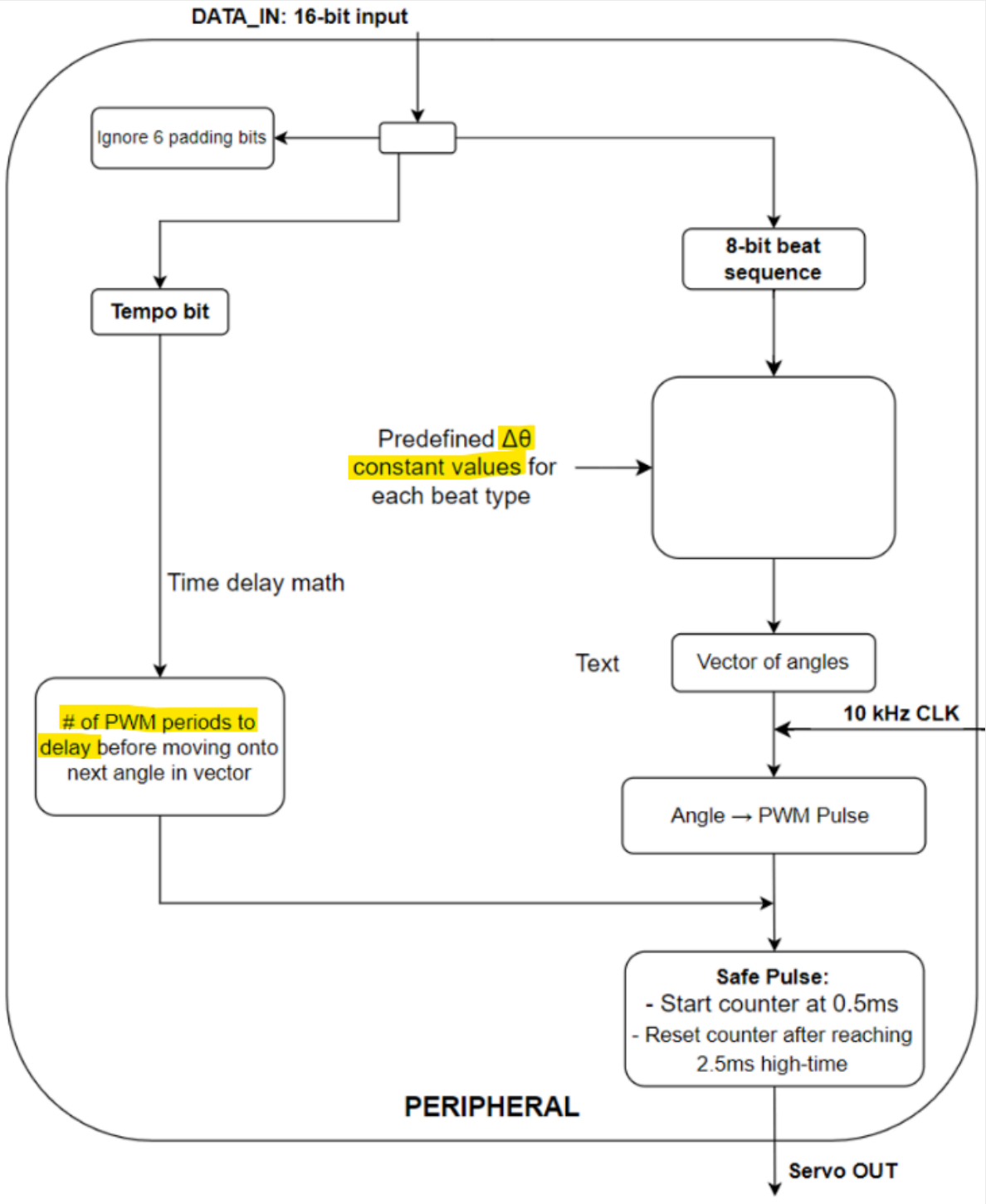
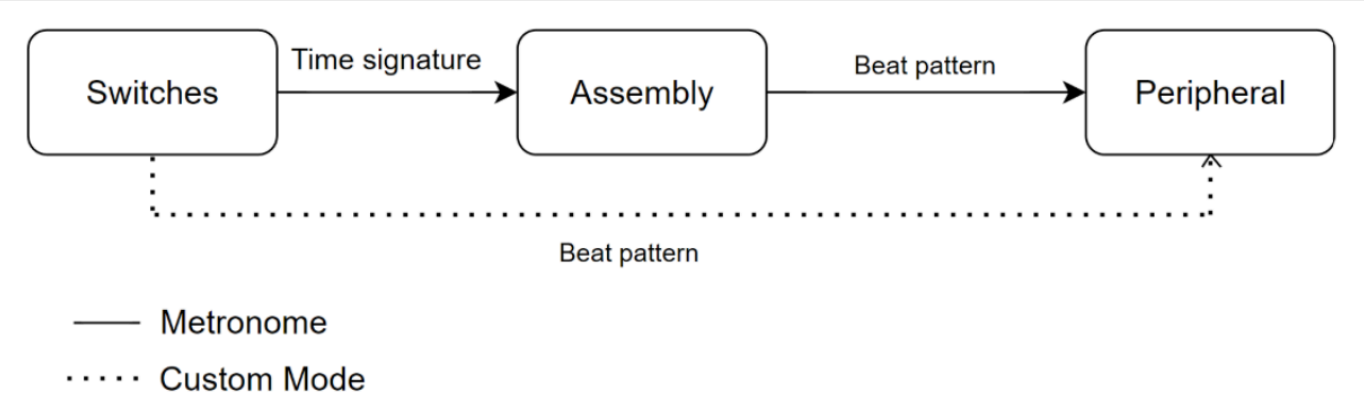
“11” - Downbeat/big movement

Switches = input bit-string to
peripheral, not affected by assembly

DEMO

- Rest, Beat, Downbeat
- Reset in order to switch sequence
- SafePulse

DESIGN DECISIONS AND OTHER APPLICATIONS



THANK YOU!