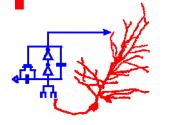


### A Flexible USB 2.0 Address-Event Representation Router

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Research Advisor: Timothy K. Horiuchi

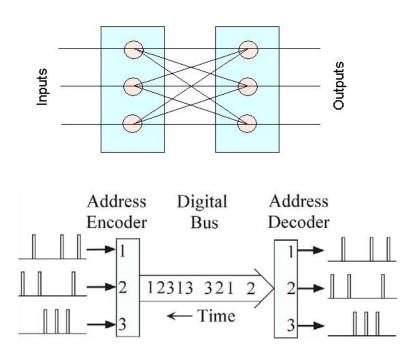


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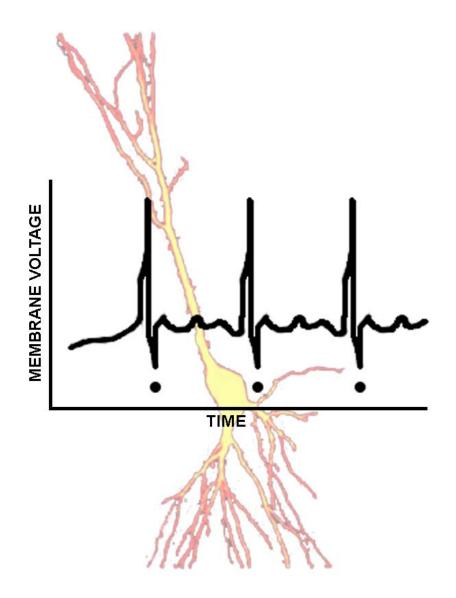


# Background

- Neural Spike Trains
- Neuromorphic VLSI
- Address-Event Representation (AER)

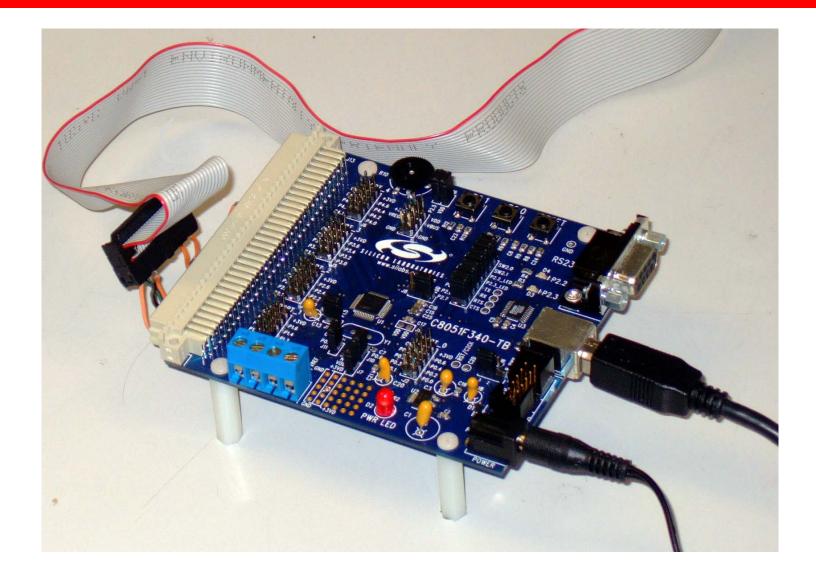


<sup>(</sup>Adapted from Boahen, 2000)



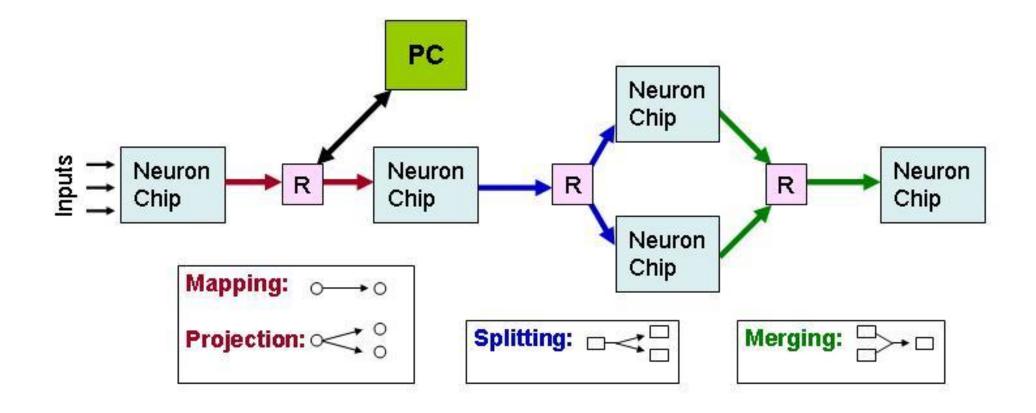


## **AER Router**





## **Router Functions**

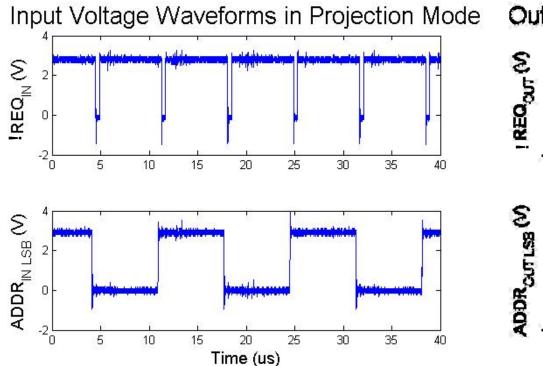




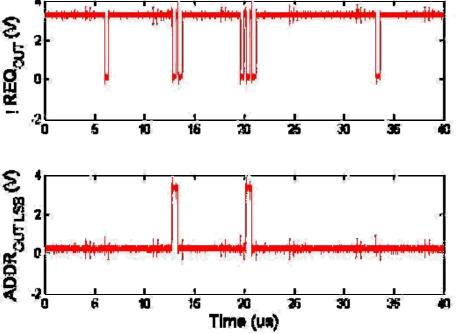
## Results

#### INPUT

### OUTPUT



Output Voltage Waveforms in Projection Mode





## Conclusion

- The AER Router is built for use in the Computational Sensorimotor Systems Laboratory.
- The AER Router handles all specified functionalities.

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