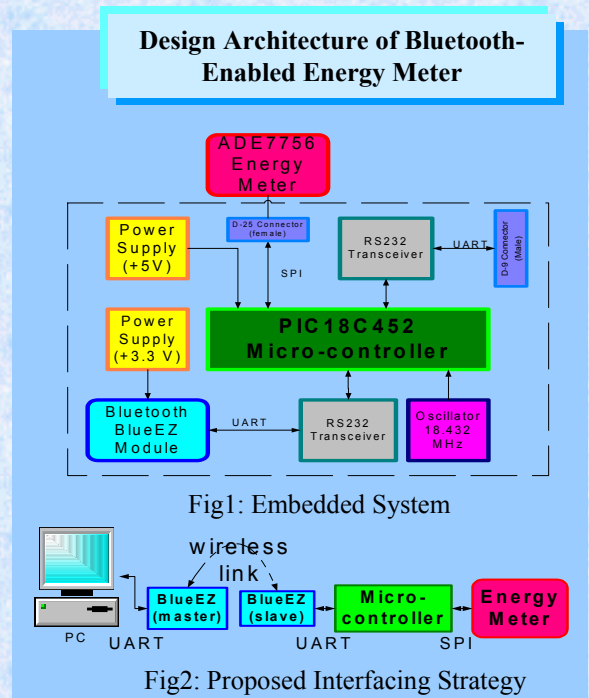
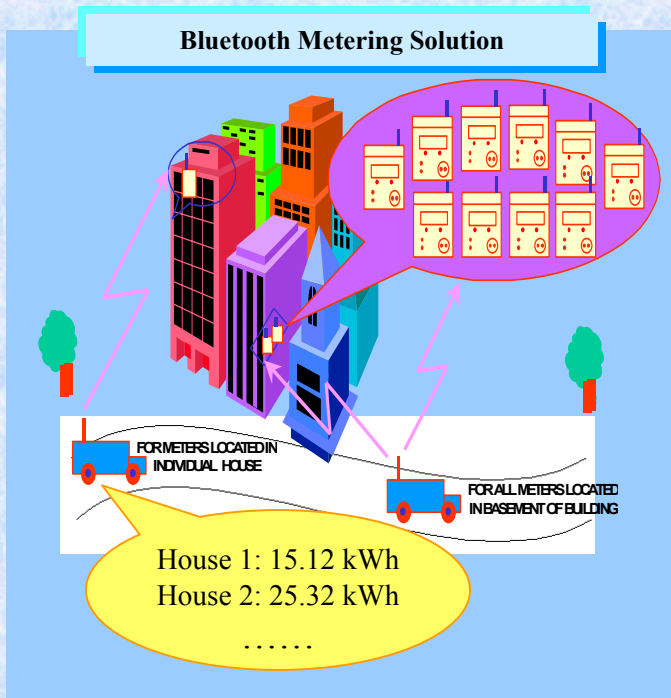


# Electricity Meter Reading via Bluetooth

**Objective** To design a Bluetooth-enable Energy Meter and develop commercially sound applications to demonstrate the advantage of a Bluetooth-enabled Energy Meter.

## Methodology

An architecture of a micro-controller based system for interfacing between the Digital Energy Meter and the Bluetooth Module is proposed. An embedded instrumentation system onboard reads the Active Energy Register values from the Digital Energy Meter. These information are then returned to the host via a wireless Bluetooth link, which will be convert to an active energy value in KWH and display in the host's GUI. An instantaneous energy consumption graph will be plot in the host GUI.



## Applications

Two interesting applications have been identified. They are Automatic Meter Reading (AMR) and Automatic Polling Mechanism (APM). AMR is a mechanism whereby the Bluetooth Energy Meter sends the recorded energy consumption of a household in the certain interval of time to a 'wirelessly' connected reader. APM is a feature where a reader will poll each and every individual Bluetooth Digital Energy Meter automatically in order to get the meter reading of the corresponding households.

<b>Supervisor</b>	Assoc Prof Shum Ping & Assoc Prof Sng Yeow Hong
<b>Project members</b>	Cheah Sin Sheng & Koay Bee Seng