Design of Multimode Wireless Broadcasting System Using NRF

K. Karthikeyan, B. Maheswari, S. Nandha Fumar, C. Poovizhi
Nandha Engineering College

In textile industries, the problem is that there is less gain of product due to lack of interest of the workers because of the continuity of the same work. In order to achieve the maximum gain in a shortest period as well as creating interest among the workers, Design of multimode wireless broadcasting system using nRF is proposed.

In textile industries, the progress of work completion should be intimated to the workers to complete the assignment in time. Hourly targets are fixed to different teams to complete the work orders. In practical, some microphone based announcement systems are followed to intimate the progress to the workers and some companies follows the chalk and board procedures. Here we proposes a multi-node wireless broadcast system using radio frequency of range 2.4 GHz. In this system, an admin will enter the hourly target in a personnel computer. The proposed wireless system will works for the distance of 1200 meters in line of sight and 500-600 meters in off sight. The wireless device will act as a transceiver and in the receiver node, there will be a LCD/LED monitor to display the targets. For the purpose of compaction, maintenance free and for low power consumption, the LCD/LED is proposed here. Each and every nodes are assigned with different addresses, by the way the admin may easily sent the different data to different nodes.

Block diagram:

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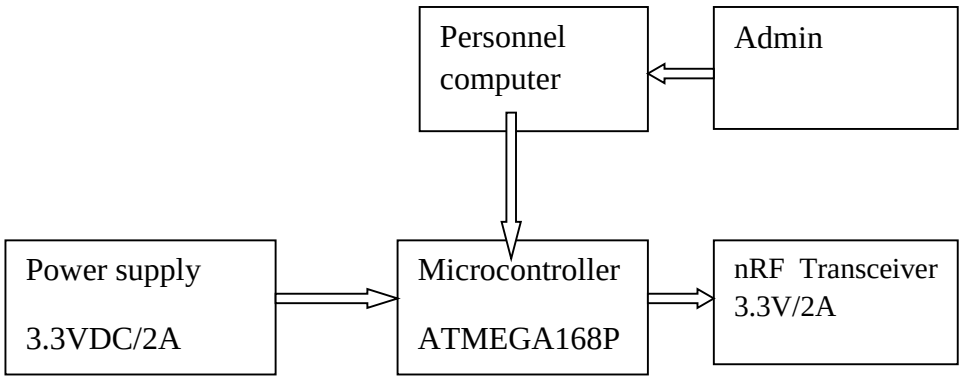
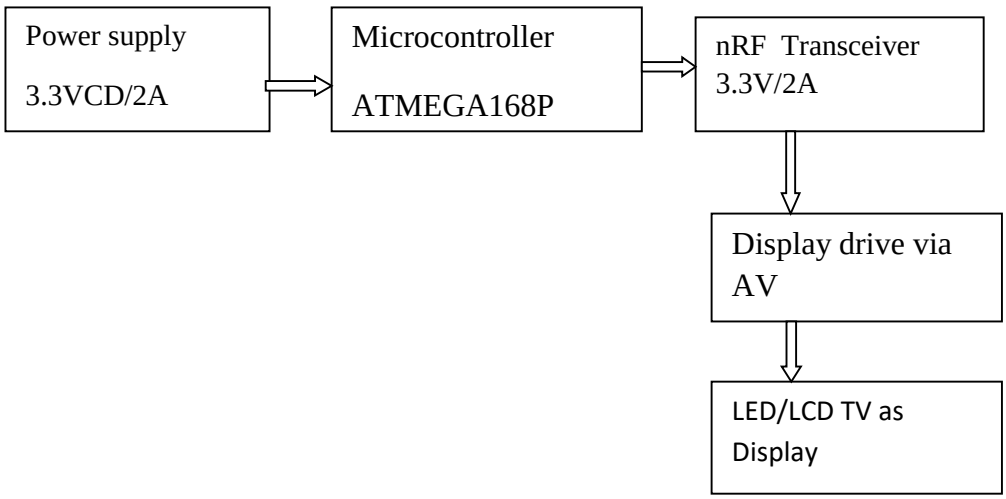
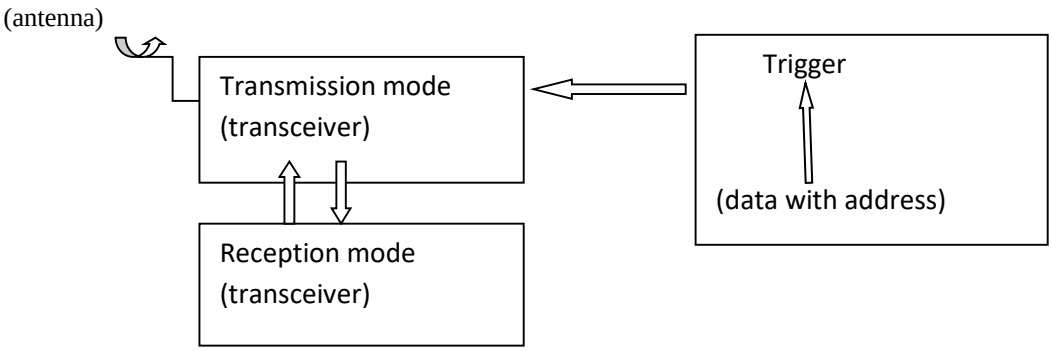


Receiver:



Working:


(antenna)
Transmission mode
(transceiver)
Reception mode
(transceiver)
Trigger
(data with address)