

IP Development and Construction of an EMC Demo Box #PRAC

Background and problem: Many interference phenomena of electromagnetic compatibility like galvanic, capacitive and inductive coupling as well as the corresponding countermeasures like bonding, filtering and shielding can be more easily understood if they are practically demonstrated. Therefore, EMC demonstration units or "demo boxes" have been popular for several decades already.

Task: A new EMC demonstration unit shall be designed, developed and constructed. It shall be based on typical designs that are described in the literature. The box should be simple in design, mechanically and electrically stable, easy to transport and to use. In contrast to the typical designs in the literature, where a full-fledged spectrum analyzer is necessary for the demonstration, a much cheaper SDR (software defined radio) receiver shall be used here, that only requires a standard computer with some USB port.

- ▶ literature research about existing EMC demonstration units
- ▶ design and development of an own demonstration box
- ▶ setup and construction of the demonstration box
- ▶ bringing this box into service

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◀ Vorherige Meldung

Nächste Meldung ▶