

**Table 1: Subject Systems**

| Subject System | # Features | # Variants | # Components | $\sum$ TA Locations | $\sum$ TA Switches | $\#$ PTA Locations | $\#$ PTA Switches | Description   |
|----------------|------------|------------|--------------|---------------------|--------------------|--------------------|-------------------|---|
|                | 2          | 2          | 3            | 24                  | 12                 | 12                 | 12                |   |
| TGC            | 2          | 2          | 3            | 24                  | 12                 | 12                 | 12                | A simple level crossing [1].  |
| ETGC           | 5          | 6          | 3            | 174                 | 42                 | 29                 | 42                | A version of TGC extended by three additional features.             |
| GC             | 7          | 24         | 5            | 1584                | 66                 | 66                 | 83                | Component of the control system operating in a modern vehicle [4].  |
| CA             | 8          | 40         | 10           | 1960                | 80                 | 49                 | 82                | Models communication among users using an Ethernet-like medium [3]. |
| AVC            | 9          | 56         | 5            | 2072                | 65                 | 37                 | 65                | A messaging protocol for communication between AV components [2].   |

## REFERENCES

- [1] Rajeev Alur, Thomas A. Henzinger, and Moshe Y. Vardi. 1993. Parametric Real-time Reasoning. In *STOC'93*. ACM, 592–601.
- [2] Klaus Havelund, Arne Skou, Kim G. Larsen, and K. Lund. 1997. Formal modeling and analysis of an audio/video protocol: an industrial case study using UPPAAL. In *RTSS'97*. 2–13.
- [3] Henrik Ejersbo Jensen, Kim G. Larsen, and Arne Skou. 1996. Modelling and analysis of a collision avoidance protocol using Spin and Uppaal. In *DIMACS'96*.
- [4] Magnus Lindahl, Paul Pettersson, and Wang Yi. 2001. Formal design and analysis of a gear controller. *STTT* 3, 3 (2001), 353–368.