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(57) Abstract :

An AI-integrated proof logic board (100) verifies mathematical theorems through stepwise logical tiles (102) placed on sensor zones (108). An embedded AI unit (104) processes each step against a logic database (106), offering visual and auditory feedback via module (114). The system includes a touchscreen (116) and camera (112) for advanced input and visualization, enhancing logical reasoning education with real-time validation, performance tracking, and interactive engagement for learners across academic levels.

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