



November, 1988

the clean output of a low resistance switch operating directly at the V_{pp} supply. The PC trace run to the memory chip looks like a transmission line with ill-defined termination characteristics. As such, Figure 6A's clean pulse degrades and rings badly (Figure 6B) at the memory IC's pins. Overshoot exceeds 20V, well beyond the 14V destruction level. The controlled edge times of the circuits discussed eliminate this problem. Further discussion of these and other circuits appears in LTC Application Note 31, "Linear Circuits for Digital Systems" (Available February, 1989).

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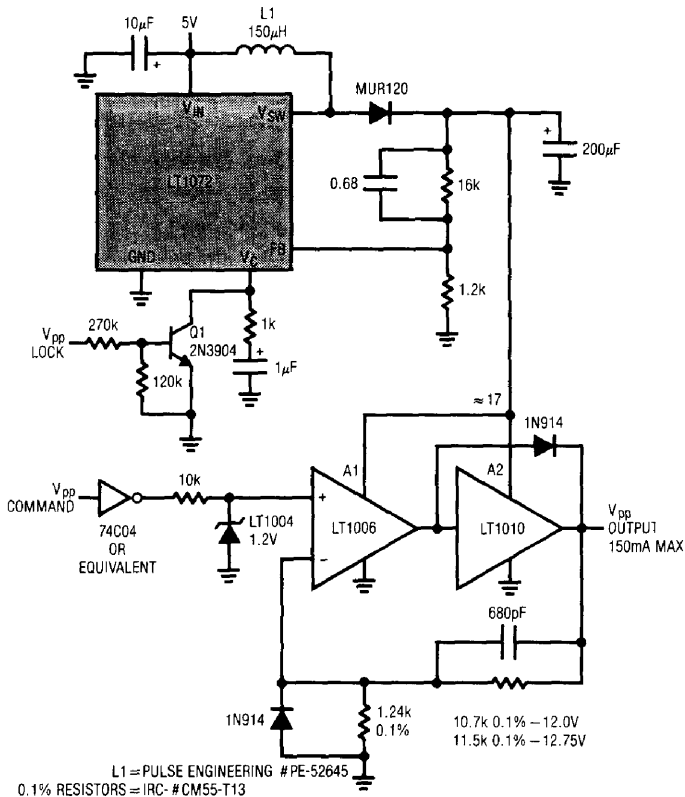


Figure 3. High Repetition Rate V_{pp} Pulse Generator

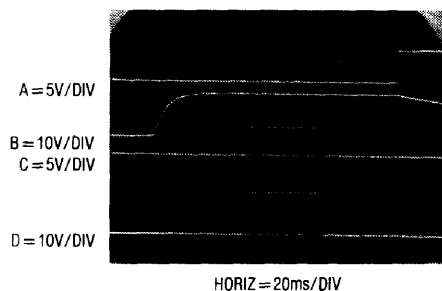


Figure 4. Operating Details of High Repetition Rate Flash Memory Pulser

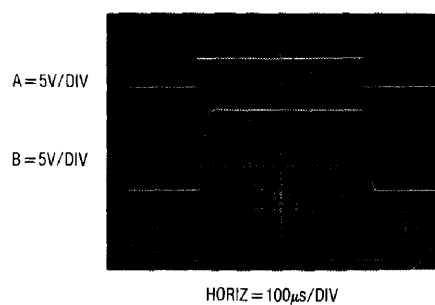


Figure 5. Expanded Scale Display of Figure 3's V_{pp} Pulse. Controlled Risetime Eliminates Overshoots.

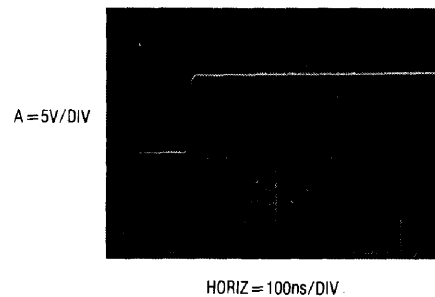
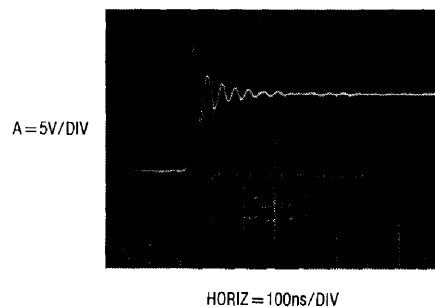


Figure 6A. An "Ideal" Flash Memory V_{pp} Pulse ...



... Figure 6B. Rings at Destructive Voltages After a PC Trace Run

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